

1000 Question and Answers

Explanations



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1) Which AWS service offers threat detection and continuously monitors for malicious activity and unauthorized behavior in AWS accounts?

- A. Amazon Macie
- B. AWS Config
- C. Amazon GuardDuty
- D. Amazon Inspector

Correct Answer: C

Amazon GuardDuty is a threat detection service that continuously monitors your AWS accounts and workloads for malicious activity and delivers detailed security findings for visibility and remediation. Continuously monitor your AWS accounts, instances, serverless and container workloads, users, databases, and storage for potential threats.

2) Which AWS service or feature enables users to block the incoming or outgoing traffic associated with specific IP addresses flowing through a VPC?

- A. Network ACLs
- B. Security groups
- C. AWS Identity and Access Management (IAM)
- D. AWS WAF

Correct Answer: A

Security groups are tied to an instance whereas Network ACLs are tied to the subnet. Network ACLs are applicable at the subnet level, so any instance in the subnet with an associated NACL will follow the rules of NACL. That's not the case with security groups, security groups have to be assigned explicitly to the instance

3) What is the customer ALWAYS responsible for managing, according to the AWS shared responsibility model?

- A. Software licenses
- B. Networking
- C. Customer data
- D. Encryption keys

Correct Answer: C

Customers are responsible for managing their data (including encryption options), classifying their assets, and using IAM tools to apply the appropriate permissions.

4) Which component of the AWS global infrastructure is made up of one or more discrete data centers that have redundant power, networking, and connectivity?

- A. AWS Region
- B. Availability Zone
- C. Edge location
- D. AWS Outposts

Correct Answer: B

An Availability Zone (AZ) is a component of the AWS global infrastructure that is made up of one or more discrete data centers that have redundant power, networking, and connectivity. Each AZ is physically separated from other AZs within a region, and is designed to be fault-tolerant and provide low-latency networking.

5) Which pillar of the AWS Well-Architected Framework refers to the ability of a system to recover from infrastructure or service disruptions and dynamically acquire computing resources to meet demand?

- A. Security
- B. Reliability
- C. Performance efficiency
- D. Cost optimization

Correct Answer: B

The Reliability pillar includes the ability of a workload to perform its intended function correctly and consistently when it's expected to. This includes the ability to operate and test the workload through its total lifecycle.

6) Who is responsible for configuration management under the AWS shared responsibility model?

- A. It is solely the responsibility of the customer.
- B. It is solely the responsibility of AWS.
- C. It is shared between AWS and the customer.
- D. It is not part of the AWS shared responsibility model.

Correct Answer: C

AWS maintains the configuration of its infrastructure devices, but a customer is responsible for configuring their own guest operating systems, databases, and applications.

7) Which duties are the responsibility of a company that is using AWS Lambda? (Choose two.)

- A. Security inside of code
- B. Selection of CPU resources
- C. Patching of operating system
- D. Writing and updating of code
- E. Security of underlying infrastructure

Correct Answer: AD

Lambda runs your code on high availability compute infrastructure and performs all the administration of your compute resources. This includes server and operating system maintenance, capacity provisioning and automatic scaling, code and security patch deployment, and code monitoring and logging. All you need to do is supply the code.

8) Which compute hosting model should be accounted for in the Total Cost of Ownership (TCO) when undertaking a cost analysis that allows physical isolation of a customer workload?

- A. Dedicated Hosts
- B. Reserved Instances
- C. On-Demand Instances
- D. No Upfront Reserved Instances

Correct Answer: A

Use Dedicated Hosts to launch Amazon EC2 instances on physical servers that are dedicated for your use. Dedicated Hosts give you additional visibility and control over how instances are placed on a physical server, and you can reliably use the same physical server over time. As a result, Dedicated Hosts enable you to use your existing server-bound software licenses like Windows Server and address corporate compliance and regulatory requirements.

9) Who is accountable for security and compliance under the AWS shared responsibility model?

- A. The customer is responsible.
- B. AWS is responsible.
- C. AWS and the customer share responsibility.
- D. AWS shares responsibility with the relevant governing body.

Correct Answer: C

Security and Compliance is a shared responsibility between AWS and the customer. This shared model can help relieve the customer's operational burden as

AWS operates, manages and controls the components from the host operating system and virtualization layer down to the physical security of the facilities in which the service operates.

10) Which of the following is a critical design concept for architecting cloud applications?

- A. Use the largest instance possible
- B. Provision capacity for peak load
- C. Use the Scrum development process
- D. Implement elasticity

Correct Answer: D

Cloud services main proposition is to provide elasticity through horizontal scaling. It's already there. As for using largest instance possible, it is not a design principle that helps cloud applications in anyway. Scrum development process is not related to architecting. Therefore, a key principle is to provision your application for on-demand capacity. Peak loads is something that cloud applications experience everyday. Peak load management should be a necessary part of cloud application design principle.

11) Which AWS services or features provide disaster recovery solutions for Amazon EC2 instances? (Choose two.)

- A. Reserved Instances
- B. EC2 Amazon Machine Images (AMIs)
- C. Amazon Elastic Block Store (Amazon EBS) snapshots
- D. AWS Shield
- E. Amazon GuardDuty

Correct Answer: BC

The AWS services or features that provide disaster recovery solutions for Amazon EC2 instances are:

C. Amazon Elastic Block Store (Amazon EBS) snapshots: Amazon EBS is a block storage service for use with Amazon EC2 instances. EBS snapshots are point-in-time copies of an EBS volume that can be used to create a new volume or restore an existing volume. EBS snapshots can be used to recover data in the event of an instance failure, or to create a new instance in a different region or Availability Zone.

B. Amazon Machine Images (AMIs): An AMI is a pre-configured virtual machine image that contains the operating system, application software, and any other required components needed to launch an instance. AMIs can be used to create new instances in the same or a different region, which can be useful for disaster recovery purposes.

12) A company wants to review its monthly costs of using Amazon EC2 and Amazon RDS for the past year. Which AWS service or tool provides this information?

- A. AWS Trusted Advisor
- B. Cost Explorer
- C. Amazon Forecast
- D. Amazon CloudWatch

Correct Answer: B

After you enable Cost Explorer, AWS prepares the data about your costs for the current month and the last 12 months, and then calculates the forecast for the next 12 months. The current month's data is available for viewing in about 24 hours. The rest of your data takes a few days longer. Cost Explorer updates your cost data at least once every 24 hours.

13) Who is the main point of contact for billing or account questions if a user has an AWS account with an Enterprise-level AWS Support plan?

- A. Solutions architect
- B. AWS Concierge Support team
- C. An AWS Marketplace seller
- D. AWS Partner Network (APN) partner

Correct Answer: B

AWS Support Concierge Included as part of the Enterprise Support plan, the Support Concierge Team are **AWS billing and account experts** that specialize in working with enterprise accounts.

14) What is one technique to provide unified billing if each department within a firm has its own AWS account?

- A. Use AWS Budgets on each account to pay only to budget.
- B. Contact AWS Support for a monthly bill.
- C. Create an AWS Organization from the payer account and invite the other accounts to join.
- D. Put all invoices into one Amazon Simple Storage Service (Amazon S3) bucket, load data into Amazon Redshift, and then run a billing report.

Correct Answer: C

You can invite an account to join an organization that has only the consolidated billing features enabled. If you later want to enable all features for the organization, invited accounts must approve the change.

15) Which cloud architecture design concept is supported by distributing workloads across various Availability Zones?

- A. Implement automation.
- B. Design for agility.
- C. Design for failure.
- D. Implement elasticity.

Correct Answer: C

Design of failure : Distribute workload data and resources across multiple Availability Zones (AZs) or, where necessary, across AWS Regions. These locations can be as diverse as required.

16) Which security-related duty is AWS accountable for under the AWS shared responsibility model?

- A. Lifecycle management of IAM credentials
- B. Physical security of global infrastructure
- C. Encryption of Amazon EBS volumes
- D. Firewall configuration

Correct Answer: B

Security and Compliance is a shared responsibility between AWS and the customer. This shared model can help relieve the customer's operational burden as AWS operates, manages and controls the components from the host operating system and virtualization layer down to the physical security of the facilities in which the service operates.



17) A company wants to migrate a critical application to AWS. The application has a short runtime. The application is invoked by changes in data or by shifts in system state. The company needs a compute solution that maximizes operational efficiency and minimizes the cost of running the application.

Which AWS solution should the company use to meet these requirements?

- A. Amazon EC2 On-Demand Instances
- B. AWS Lambda
- C. Amazon EC2 Reserved Instances
- D. Amazon EC2 Spot Instances

Correct Answer: B

AWS Lambda supports function packaging and deployment as container images, making it easy for customers to build Lambda-based applications using familiar container image tooling, workflows, and dependencies. Customers also benefit from Lambda's operational simplicity, automatic scaling with sub-second startup times, high availability, pay-for-use billing model, and native integrations with over 200 AWS services and software-as-a service (SaaS) applications.



18) Which AWS service or feature allows users to connect with and deploy AWS services programmatically?

- A. AWS Management Console
- B. AWS Cloud9
- C. AWS CodePipeline
- D. AWS software development kits (SDKs)

Correct Answer: D

AWS software development kits (SDKs) allow users to connect with and deploy AWS services programmatically. AWS provides SDKs for several popular programming languages, including Java, Python, JavaScript, and C++.

19) According to the AWS shared responsibility model, who is responsible for managing IAM user access and secret keys?

- A. IAM access and secret keys are static, so there is no need to rotate them.
- B. The customer is responsible for rotating keys.
- C. AWS will rotate the keys whenever required.
- D. The AWS Support team will rotate keys when requested by the customer.

Correct Answer: B

20) To install a PCI-compliant workload on AWS, which of the following tasks is required?

- A. Use any AWS service and implement PCI controls at the application layer
- B. Use an AWS service that is in-scope for PCI compliance and raise an AWS support ticket to enable PCI compliance at the application layer
- C. Use any AWS service and raise an AWS support ticket to enable PCI compliance on that service
- D. Use an AWS service that is in scope for PCI compliance and apply PCI controls at the application layer

Correct Answer: D

21) Which of the following is a suggestion made by an AWS Trusted Advisor? (Select two.)

- A. Cost optimization
- B. Auditing
- C. Serverless architecture
- D. Performance
- E. Scalability

Correct Answer: AD



You can use the Trusted Advisor Recommendations page of the Trusted Advisor console to review check results for your AWS account and then follow the recommended steps to fix any issues. For example, Trusted Advisor might recommend that you delete unused resources to reduce your monthly bill, such as an Amazon Elastic Compute Cloud (Amazon EC2) instance.

22) A company plans to create a data lake that uses Amazon S3.
Which factor will have the MOST effect on cost?

- A. The selection of S3 storage tiers
- B. Charges to transfer existing data into Amazon S3
- C. The addition of S3 bucket policies
- D. S3 ingest fees for each request

Correct Answer: A

Which storage tier they pick out of all the options can largely effect the final cost.

23) A company is launching an ecommerce application that must always be available. The application will run on Amazon EC2 instances continuously for the next 12 months.

What is the MOST cost-effective instance purchasing option that meets these requirements?

- A. Spot Instances
- B. Savings Plans
- C. Dedicated Hosts
- D. On-Demand Instances

Correct Answer: B

Amazon EC2 Savings Plans enable you to reduce your compute costs by committing to a consistent amount of compute usage for a 1-year or 3-year term. This results in savings of up to 72% over On-Demand Instance costs. Any usage up to the commitment is charged at the discounted Savings Plan rate (for example, \$10 an hour). Any usage beyond the commitment is charged at regular On-Demand Instance rates.

24) Which pillar of the AWS Well-Architected Framework is supported by the design philosophy of performing operations as code?

- A. Performance efficiency
- B. Operational excellence
- C. Reliability
- D. Security

Correct Answer: B

1. Operational Excellence

The Operational Excellence pillar includes the ability to support development and run workloads effectively, gain insight into their operation, and continuously improve, supporting processes and procedures to deliver business value. You can find prescriptive guidance on implementation in the [Operational Excellence Pillar whitepaper](#).

Design Principles

There are five design principles for operational excellence in the cloud:

- Perform operations as code
- Make frequent, small, reversible changes
- Refine operations procedures frequently
- Anticipate failure
- Learn from all operational failures

25) What is the customer's responsibility while using Amazon RDS?

- A. Patching and maintenance of the underlying operating system.
- B. Managing automatic backups of the database.
- C. Controlling network access through security groups.
- D. Replacing failed instances in the event of a hardware failure.

Correct Answer: C

Amazon RDS is responsible for hosting the software components and infrastructure of DB instances and DB cluster. You are responsible for query tuning, which is the process of adjusting SQL queries to improve performance. Query performance is highly dependent on database design, data size, data distribution, application workload, and query patterns, which can vary greatly. Monitoring and tuning are highly individualized processes that you own for your RDS databases. You can use Amazon RDS Performance Insights and other tools to identify problematic queries.

26) What is the customer's obligation while using an AWS managed service under the AWS shared responsibility model?

- A. Physical security of the data centers
- B. Server-side encryption
- C. Customer data
- D. Operating system patching

Correct Answer: C

Customers are responsible for managing their data (including encryption options), classifying their assets, and using IAM tools to apply the appropriate permissions.

27) Which AWS service or feature can a company use to determine which business unit is using specific AWS resources?

- A. Cost allocation tags
- B. Key pairs
- C. Amazon Inspector
- D. AWS Trusted Advisor

Correct Answer: A

You can use tags to organize your resources, and cost allocation tags to track your AWS costs on a detailed level. After you activate cost allocation tags, AWS uses the cost allocation tags to organize your resource costs on your cost allocation report, to make it easier for you to categorize and track your AWS costs.

28) Which AWS service or tool should a company use to centrally request and track service limit increases?

- A. AWS Config
- B. Service Quotas
- C. AWS Service Catalog
- D. AWS Budgets

Correct Answer: B

You can now use Service Quotas in AWS GovCloud (US) Regions to view and manage your service quotas at scale as your AWS workloads grow.

29) Which pillar of the AWS Well-Architected Framework is designed on the idea of frequent, minor, reversible changes?

- A. Reliability
- B. Operational excellence
- C. Performance efficiency
- D. Cost optimization

Correct Answer: B

There are five design principles for operational excellence in the cloud:

- 1) Perform operations as code
- 2) Make frequent, small, reversible changes
- 3) Refine operations procedures frequently
- 4) Anticipate failure
- 5) Learn from all operational failures

30) Which AWS service can identify the person who made the API request when an Amazon EC2 instance is terminated?

- A. Amazon CloudWatch
- B. AWS CloudTrail
- C. AWS X-Ray
- D. AWS Identity and Access Management (IAM)

Correct Answer: B

AWS CloudTrail allows AWS customers to **record API calls, sending log files to Amazon S3 buckets for storage.**

31) All AWS users have access to which AWS Trusted Advisor check?

- A. Core checks
- B. All checks
- C. Cost optimization checks
- D. Fault tolerance checks

Correct Answer: A

AWS Basic Support and AWS Developer Support customers can access core security checks

32) Which of the following is an example of security in the AWS Cloud under the AWS shared responsibility model?

- A. Managing edge locations
- B. Physical security
- C. Firewall configuration
- D. Global infrastructure

Correct Answer: C

The customer assumes responsibility and management of the guest operating system (including updates and security patches), other associated application software as well as the configuration of the AWS provided security group firewall.

33) Which documentation does AWS Artifact provide?

- A. Amazon EC2 terms and conditions
- B. AWS ISO certifications
- C. A history of a company's AWS spending
- D. A list of previous-generation Amazon EC2 instance types

Correct Answer: B

AWS Artifact provides on-demand downloads of AWS security and compliance documents, such as AWS ISO certifications, Payment Card Industry (PCI), and Service Organization Control (SOC) reports.

34) Which task requires using AWS account root user credentials?

- A. Viewing billing information
- B. Changing the AWS Support plan
- C. Starting and stopping Amazon EC2 instances
- D. Opening an AWS Support case

Correct Answer: B

There are only a few tasks that require you to use the root user:

- Change your account settings. This includes the account name, email address, root user password, and root user access keys. ...
- View certain tax invoices. ...
- Close your AWS account.
- Restore IAM user permissions. ...
- Change your AWS Support plan or Cancel your AWS Support plan. ...

35) Permissions for which of the following are managed by service control policies (SCPs)?

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

Correct Answer: C

Service Control Policies (SCPs) are IAM-like policies to manage permissions in AWS Organizations. SCPs restrict the actions allowed for accounts within the organization making each one of them compliant with your guidelines.

36) Which of the following AWS services should a client utilize to audit the change management of AWS resources?

- A. AWS Config
- B. AWS Trusted Advisor
- C. Amazon CloudWatch
- D. Amazon Inspector

Correct Answer: A

AWS Config is a service that enables you to assess, audit, and evaluate the configurations of your AWS resources. Config continuously monitors and records your

AWS resource configurations and allows you to automate the evaluation of recorded configurations against desired configurations. With Config, you can review changes in configurations and relationships between AWS resources, dive into detailed resource configuration histories, and determine your overall compliance against the configurations specified in your internal guidelines. This enables you to simplify compliance auditing, security analysis, change management, and operational troubleshooting.

37) What is raised when a business deploys web servers across several AWS Regions?

- A. Coupling
- B. Availability
- C. Security
- D. Durability

Correct Answer: *B*

Availability (also known as *service availability*) is both a commonly used metric to quantitatively measure resiliency, as well as a target resiliency objective.

•**Availability** is the percentage of time that a workload is available for use.

Available for use means that it performs its agreed function successfully when required.

38) Which of the following is a shared control between a client and AWS under the shared responsibility model?

- A. Physical controls
- B. Patch management
- C. Zone security
- D. Data center auditing

Correct Answer: B

Patch Management: AWS is responsible for patching and fixing flaws within the infrastructure, but customers are responsible for patching their guest OS and applications

39) What is the scope of a VPC within the AWS network?

- A. A VPC can span all Availability Zones globally.
- B. A VPC must span at least two subnets in each AWS Region.
- C. A VPC must span at least two edge locations in each AWS Region.
- D. A VPC can span all Availability Zones within an AWS Region.

Correct Answer: D

Amazon VPC lets you provision a logically isolated section of the Amazon Web Services (AWS) cloud where you can launch AWS resources in a virtual network that you define. You have complete control over your virtual networking environment, including selection of your own IP address ranges, creation of subnets, and configuration of route tables and network gateways.

40) Which of the following are components of an AWS Site-to-Site VPN connection? (Choose two.)

- A. AWS Storage Gateway
- B. Virtual private gateway
- C. NAT gateway
- D. Customer gateway
- E. Internet gateway

Correct Answer: BD

B. Virtual private gateway: A virtual private gateway is the Amazon VPC side of a VPN connection. It acts as the termination point for VPN connections.

D. Customer gateway: A customer gateway is the on-premises side of a VPN connection. It is a physical or software appliance that is connected to your on-premises network and is responsible for establishing the VPN connection to your VPC.

41) According to the AWS shared responsibility model, which job is shared between AWS and the customer?

- A. Physical and environmental controls
- B. Server hardware management and encryption
- C. Application security
- D. Patch management and configuration management

Correct Answer: D

Shared Controls which apply to both the infrastructure layer and customer layers, but in completely separate contexts or perspectives. In a shared control, AWS provides the requirements for the infrastructure and the customer must provide their own control implementation within their use of AWS services.

Examples include:

- ☞ Patch Management AWS is responsible for patching and fixing flaws within the infrastructure, but customers are responsible for patching their guest OS and applications.
- ☞ Configuration Management AWS maintains the configuration of its infrastructure devices, but a customer is responsible for configuring their own guest operating systems, databases, and applications.

42) How should an application be created to function on the AWS Cloud in accordance with best practices?

- A. Use tightly coupled components.
- B. Use loosely coupled components.
- C. Use infrequently coupled components.
- D. Use frequently coupled components.

Correct Answer: B

The more **loosely coupled** the application **components** are, the better they will scale.

43) Which cloud architectural concept is supported by a system that can scale in terms of users, traffic, or data quantity without sacrificing performance?

- A. Think parallel
- B. Implement elasticity
- C. Decouple your components
- D. Design for failure

Correct Answer: B

Elasticity - AWS Well-Architected Framework Elasticity The ability to acquire resources as you need them and release resources when you no longer need them. In the cloud, you want to do this automatically.

44) The following describes an application that spans various Availability Zones:

- A. being highly available
- B. having global reach
- C. using an economy of scale
- D. having elasticity

Correct Answer: A

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.

45) A company needs to establish a connection between two VPCs. The VPCs are located in two different AWS Regions. The company wants to use the existing infrastructure of the VPCs for this connection. Which AWS service or feature can be used to establish this connection?

- A. AWS Client VPN
- B. VPC peering
- C. AWS Direct Connect
- D. VPC endpoints

Correct Answer: B

A VPC peering connection is a networking connection between two VPCs that enables you to route traffic between them using private IPv4 addresses or IPv6 addresses. Instances in either VPC can communicate with each other as if they are within the same network. You can create a VPC peering connection between your own VPCs, or with a VPC in another AWS account. The VPCs can be in different Regions (also known as an inter-Region VPC peering connection).

46) According to the AWS shared responsibility model, what responsibility does a customer have when using Amazon RDS to host a database?

- A. Manage connections to the database
- B. Install Microsoft SQL Server
- C. Design encryption-at-rest strategies
- D. Apply minor database patches

Correct Answer: A

Amazon RDS encryption is currently available for all database engines and storage types, except for SQL Server Express Edition. Amazon RDS can encrypt your Amazon RDS DB instances. Data that is encrypted at rest includes the underlying storage for DB instances, its automated backups, read replicas, and snapshots.

47) Which duty is the customer's responsibility while administering AWS Lambda functions under the AWS shared responsibility model?

- A. Creating versions of Lambda functions
- B. Maintaining server and operating systems
- C. Scaling Lambda resources according to demand
- D. Updating the Lambda runtime environment

Correct Answer: A

You can use versions to manage the deployment of your functions. For example, you can publish a new version of a function for beta testing without affecting users of the stable production version. Lambda creates a new version of your function each time that you publish the function. The new version is a copy of the unpublished version of the function.

48) Which of the following is not a duty of the client under the AWS shared responsibility model?
(Select two.)

- A. Decommissioning of physical storage devices
- B. Security group and ACL configuration
- C. Patch management of an Amazon RDS instance operating system
- D. Controlling physical access to data centers
- E. Patch management of an Amazon EC2 instance operating system

Correct Answer: AD

AWS assets are centrally managed through an inventory management system that stores and tracks owner, location, status, maintenance, and descriptive information for AWS-owned assets. Following procurement, assets are scanned and tracked, and assets undergoing maintenance are checked and monitored for ownership, status, and resolution.

49) Which service or functionality does AWS Enterprise Support provide that other AWS Support subscriptions do not?

- A. AWS Trusted Advisor
- B. AWS Support case
- C. Concierge team
- D. Amazon Connect

Correct Answer: C

•AWS Support Concierge Included as part of the Enterprise Support plan, the Support Concierge Team are **AWS billing and account experts** that specialize in working with enterprise accounts.

50) What attributes of an AWS account can AWS Trusted Advisor monitor and advise on? (Select two.)

- A. Compliance with security best practices
- B. Application performance
- C. Network utilization
- D. Cost optimization
- E. Compliance status

Correct Answer: AD



51) Which feature enables Amazon EC2 instances to be more elastic in response to changing workload demand?

- A. Amazon GuardDuty
- B. AWS WAF
- C. AWS Shield
- D. Amazon Inspector

Correct Answer: C

AWS Shield is a managed Distributed Denial of Service (DDoS) protection service that safeguards applications running on AWS.

52) Which AWS service or feature acts as a firewall for Amazon EC2 instances?

- A. Network ACL
- B. Elastic network interface
- C. Amazon VPC
- D. Security group

Correct Answer: D

A security group is a virtual firewall that controls inbound and outbound traffic for an Amazon EC2 instance.

53) Which feature enables Amazon EC2 instances to be more elastic in response to changing workload demand?

- A. Virtualization Management
- B. Hardware management
- C. Encryption management
- D. Facilities management
- E. Firewall management

Correct Answer: A

- Virtual computing environments, known as *instances*

54) What is the unique advantage that Enterprise Support customers receive?

- A. Access to a Technical Project Manager
- B. Access to a Technical Account Manager
- C. Access to a Cloud Support Engineer
- D. Access to a Solutions Architect

Correct Answer: B

With Enterprise Support, you get 24x7 technical support from high-quality engineers, tools and technology to automatically manage health of your environment, consultative architectural guidance delivered in the context of your applications and use-cases, and a designated Technical Account Manager (TAM) to coordinate access to proactive / preventative programs and AWS subject matter experts. AWS Enterprise Support is recommended if you have business and/or mission critical workloads in AWS.

55) What are the advantages of AWS Cloud elasticity?

- A. Ensure web traffic is automatically spread across multiple AWS Regions.
- B. Minimize storage costs by automatically archiving log data.
- C. Enable AWS to automatically select the most cost-effective services.
- D. Automatically adjust the required compute capacity to maintain consistent performance.

Correct Answer: D

Elasticity

The ability to acquire resources as you need them and release resources when you no longer need them. In the cloud, you want to do this automatically.

56) What is Amazon CloudFront?

- A. A global content delivery network
- B. A web service to schedule regular data movement
- C. A development front-end to Amazon Web Services
- D. An encrypted endpoint to upload files to the cloud

Correct Answer: A

Amazon CloudFront is a global content delivery network (CDN) service that accelerates delivery of your websites, APIs, video content or other web assets through CDN caching. It integrates with other Amazon Web Services products to give developers and businesses an easy way to accelerate content to end users with no minimum usage commitments.

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

57) Which of the following are capabilities of the AWS Cost Management tools? (Select two.)

- A. Terminate all AWS resources automatically if budget thresholds are exceeded.
- B. Break down AWS costs by day, service, and linked AWS account.
- C. Create budgets and receive notifications if current or forecasted usage exceeds the budgets.
- D. Switch automatically to Reserved Instances or Spot Instances, whichever is most cost-effective.
- E. Move data stored in Amazon S3 to a more cost-effective storage class.

Correct Answer: BC

AWS offers the following tools for Cost Management:

- Billing Dashboard
- Cost Explorer
- Cost Usage and Report

58) How should an Amazon EC2 instance be granted access to an Amazon S3 bucket in accordance with security best practices?

- A. Hard code an IAM user's secret key and access key directly in the application, and upload the file.
- B. Store the IAM user's secret key and access key in a text file on the EC2 instance, read the keys, then upload the file.
- C. Have the EC2 instance assume a role to obtain the privileges to upload the file.
- D. Modify the S3 bucket policy so that any service can upload to it at any time.

Correct Answer: C

To connect to your S3 buckets from your EC2 instances, you must do the following:

- 1. Create an AWS Identity and Access Management (IAM) profile role that grants access to Amazon S3.
- 2. Attach the IAM instance profile to the instance.
- 3. Validate permissions on your S3 bucket.
- 4. Validate network connectivity from the EC2 instance to Amazon S3.
- 5. Validate access to S3 buckets.

59) A company has a single Amazon EC2 instance. The company wants to adopt a highly available architecture. What can the company do to meet this requirement?

- A. Scale vertically to a larger EC2 instance size.
- B. Scale horizontally across multiple Availability Zones.
- C. Purchase an EC2 Dedicated Instance.
- D. Change the EC2 instance family to a compute optimized instance.

Correct Answer: B

AWS Auto Scaling monitors your applications and automatically adjusts capacity to maintain steady, predictable performance at the lowest possible cost. Using AWS Auto Scaling, it's easy to setup application scaling for multiple resources across multiple services in minutes.

60) A company's on-premises application deployment cycle was 3-4 weeks. After migrating to the AWS Cloud, the company can deploy the application in 2-3 days.

Which benefit has this company experienced by moving to the AWS Cloud?

- A. Elasticity
- B. Flexibility
- C. Agility
- D. Resilience

Correct Answer: C

In a cloud computing environment, new IT resources are only a click away, which means that you reduce the time to make those resources available to your developers from weeks to just minutes. This results in a dramatic increase in agility for the organization, since the cost and time it takes to experiment and develop is significantly lower.

61) Which of the following price options would result in the highest reduction after making an Amazon EC2 Dedicated Host reservation?

- A. No upfront payment
- B. Hourly on-demand payment
- C. Partial upfront payment
- D. All upfront payment

Correct Answer: D

With the **All Upfront** option, you pay for the entire Dedicated Host Reservation with one upfront payment. This option provides you with the largest discount compared to On-Demand pricing.

62) Which AWS services and/or features increase availability and mitigate the effect of failures while constructing a typical three-tier web application? (Select two.)

- A. AWS Auto Scaling for Amazon EC2 instances
- B. Amazon VPC subnet ACLs to check the health of a service
- C. Distributed resources across multiple Availability Zones
- D. AWS Server Migration Service (AWS SMS) to move Amazon EC2 instances into a different Region
- E. Distributed resources across multiple AWS points of presence

Correct Answer: AC

You can use Auto Scaling to help make sure that you are running the desired number of healthy EC2 instances across multiple Availability Zones. Auto Scaling can also automatically increase the number of EC2 instances during demand spikes to maintain performance and decrease capacity during less busy periods to optimize costs

63) Which of the following IT responsibilities may AWS relieve a company's IT team of? (Select two.)

- A. Patching database software
- B. Storage capacity planning
- C. Creating database schemas
- D. Setting up access controls for data
- E. Writing application code

Correct Answer: AB

AWS maintains the configuration of its infrastructure devices, but a customer is responsible for configuring their own guest operating systems, databases, and applications.

64) Which of the following is included in the AWS Trusted Advisor checks? (Select two.)

- A. Information on Amazon S3 bucket permissions
- B. AWS service outages
- C. Multi-factor authentication enabled on the AWS account root user
- D. Available software patches
- E. Number of users in the account

Correct Answer: AC

Trusted Advisor can help improve the security of your AWS environment by suggesting foundational security best practices curated by security experts. Examples include identifying RDS security group access risk, exposed access keys, and unnecessary S3 bucket permissions.

65) What is AWS accountable for under the AWS shared responsibility model?

- A. Configuring Amazon VPC
- B. Managing application code
- C. Maintaining application traffic
- D. Managing the network infrastructure

Correct Answer: D

AWS is responsible for protecting the infrastructure that runs all of the services offered in the AWS Cloud. This infrastructure is composed of the hardware, software, networking, and facilities that run AWS Cloud services.

66) Which of the following tasks may be used to improve Amazon EC2 costs? (Select two.)

- A. Implementing Auto Scaling groups to add and remove instances based on demand.
- B. Creating a policy to restrict IAM users from creating new instances.
- C. Setting a budget to limit spending on EC2 instances using AWS Budgets.
- D. Purchasing Reserved Instances.
- E. Adding EC2 instances to a second AWS Region that is geographically close to the end users.

Correct Answer: AD

Take advantage of unused EC2 capacity for up to 90% off On-Demand pricing. Spot Instances are perfect for fault-tolerant, stateless applications like containers, big data, AI/ML and more.

Improve application resiliency and availability by automatically adding or removing EC2 instances and by mixing multiple purchase options and instance types. EC2 Auto Scaling ensures you are not over or under-provisioning compute to match application demand.

67) Which of the following are included in AWS Enterprise Support? (Choose two.)

- A. AWS technical account manager (TAM)
- B. AWS partner-led support
- C. AWS Professional Services
- D. Support of third-party software integration to AWS
- E. 5-minute response time for critical issues

Correct Answer: AD

Designated point of contact

A Technical Account Manager (TAM) is your designated technical point of contact who helps you onboard, provides advocacy and guidance to help plan and build solutions using best practices, coordinates access to subject matter experts, assists with case management, presents insights and recommendations on your AWS spend, workload optimization, and event management, and proactively keeps your AWS environment healthy.

Third-party software support

Guidance, configuration, and troubleshooting of AWS interoperability with many common operating systems, platforms, and application stack components.

68) A company wants to limit its employees' AWS access to a portfolio of predefined AWS resources. Which AWS solution should the company use to meet this requirement?

- A. AWS Config
- B. AWS software development kits (SDKs)
- C. AWS Service Catalog
- D. AWS AppSync

Correct Answer: C

AWS Service Catalog allows organizations to create and manage catalogs of IT services that are approved for use on AWS. These IT services can include everything from virtual machine images, servers, software, and databases to complete multi-tier application architectures.

69) Which of the following is a customer duty under the AWS shared responsibility model?

- A. Installing security patches for the Xen and KVM hypervisors
- B. Installing operating system patches for Amazon DynamoDB
- C. Installing operating system security patches for Amazon EC2 database instances
- D. Installing operating system security patches for Amazon RDS database instances

Correct Answer: C

Customers that deploy an Amazon EC2 instance are responsible for management of the guest operating system (including updates and security patches), any application software or utilities installed by the customer on the instances, and the configuration of the AWS-provided firewall (called a security group) on each instance.

70) A firm wishes to develop a new line of business application.

Which design concepts should be applied in accordance with the AWS Well-Architected Framework? (Select two.)

- A. Consolidate multiple AWS accounts into a single account.
- B. Buy and host hardware in the AWS Cloud.
- C. Decouple the AWS Cloud architecture to break up monolithic deployments.
- D. Move on-premises network hardware to VPCs.
- E. Design elasticity into the AWS Cloud design.

Correct Answer: CE

AWS Well-Architected helps cloud architects build secure, high-performing, resilient, and efficient infrastructure for a variety of applications and workloads.

71) Which scenarios should a user report to the AWS Abuse team? (Select two.)

- A. A DDoS attack is being made on an AWS resource.
- B. A SQL injection attack is being made from an IP address that is not an AWS address.
- C. AWS resources are being used to host objectionable or illegal content.
- D. A company's resources are being used in a way that is inconsistent with corporate policy.
- E. A company is receiving HTTPS requests on a web server that is serving HTTP.

Correct Answer: AC

The AWS Trust & Safety team can assist you when AWS resources are used to engage in the following types of abusive behavior:

- Spam
- Port scanning
- Denial-of-service (DoS) attacks
- Intrusion attempts
- Hosting prohibited content
- Distributing malware

72) Which of the following is the customer's obligation under the AWS shared responsibility model?

- A. Patching guest OS and applications
- B. Patching and fixing flaws in the infrastructure
- C. Physical and environmental controls
- D. Configuration of AWS infrastructure devices

Correct Answer: A

The customer assumes responsibility and management of the guest operating system (including updates and security patches), other associated application software as well as the configuration of the AWS provided security group firewall. Customers should carefully consider the services they choose as their responsibilities vary depending on the services used, the integration of those services into their IT environment, and applicable laws and regulations. The nature of this shared responsibility also provides the flexibility and customer control that permits the deployment.

73) An online company was running a workload on premises and was struggling to launch new products and features. After migrating the workload to AWS, the company can quickly launch products and features and can scale its infrastructure as required.

Which AWS Cloud value proposition does this scenario describe?

- A. Business agility
- B. High availability
- C. Security
- D. Centralized auditing

Correct Answer: A

Increase speed and agility – In a cloud computing environment, new IT resources are only a click away, which means that you reduce the time to make those resources available to your developers from weeks to just minutes. This results in a dramatic increase in agility for the organization, since the cost and time it takes to experiment and develop is significantly lower.

74) Which of the following are advantages of the AWS Cloud? (Choose two.)

- A. AWS management of user-owned infrastructure
- B. Ability to quickly change required capacity
- C. High economies of scale
- D. Increased deployment time to market
- E. Increased fixed expenses

Correct Answer: BC

More customers lead to higher **AWS** usage which leads to more infrastructure.

The **economies of scale** effect occurs because costs can now be spread over a larger number of customers. The infrastructure becomes cheaper, prices can be reduced and new customers benefit from the lower prices.

75) AWS has the ability to achieve lower pay-as-you-go pricing by aggregating usage across hundreds of thousands of users. This describes which advantage of the AWS Cloud?

- A. Launch globally in minutes
- B. Increase speed and agility
- C. High economies of scale
- D. No guessing about compute capacity

Correct Answer: C

•**Benefit from massive economies of scale** – By using cloud computing, you can achieve a lower variable cost than you can get on your own. Because usage from hundreds of thousands of customers is aggregated in the cloud, providers such as AWS can achieve higher economies of scale, which translates into lower pay as-you-go prices.

76) Which AWS serverless platform services are included?

- A. Amazon EC2, Amazon S3, Amazon Athena
- B. Amazon Kinesis, Amazon SQS, Amazon EMR
- C. AWS Step Functions, Amazon DynamoDB, Amazon SNS
- D. Amazon Athena, Amazon Cognito, Amazon EC2

Correct Answer: C

AWS provides a set of fully managed services that you can use to build and run serverless applications. Serverless applications don't require provisioning, maintaining, and administering servers for backend components such as compute, databases, storage, stream processing, message queueing, and more. You also no longer need to worry about ensuring application fault tolerance and availability. Instead, AWS handles all of these capabilities for you. Serverless platform includes: AWS Lambda, Amazon S3, DynamoDB, API gateway, Amazon SNS, AWS step functions, Amazon kinesis and developing tools and services.

77) According to the AWS shared responsibility model, which of the following is the customer's obligation?

- A. Patching underlying infrastructure
- B. Physical security
- C. Patching Amazon EC2 instances
- D. Patching network infrastructure

Correct Answer: C

To ensure the best results from running Windows on Amazon EC2, AWS recommend that you perform the following best practices.

- Update drivers
- Use the latest Windows AMIs
- Security
- Storage
- Resource management
- Backup and recovery
- Networking

78) Which of the following is the customer's obligation under the shared responsibility model?

- A. Ensuring that disk drives are wiped after use.
- B. Ensuring that firmware is updated on hardware devices.
- C. Ensuring that data is encrypted at rest.
- D. Ensuring that network cables are category six or higher.

Correct Answer: C

In short AWS responsibility "**Security of the Cloud**" and **Customer responsibility "Security in the Cloud"**. In the cases where you store data in RDS and S3, the customer takes full responsibility for encryption. However both RDS and S3 provides you necessary tools to encrypt the data at rest.

79) What is the AWS Cloud's value proposition?

- A. AWS is responsible for security in the AWS Cloud
- B. No long-term contract is required
- C. Provision new servers in days
- D. AWS manages user applications in the AWS Cloud

Correct Answer: B

All paid **AWS Support** plans are billed monthly, with no long-term contracts. AWS Support fees are calculated on a per-account basis for Business and Developer Support plans. For Enterprise Support, you are billed based on the aggregate monthly AWS charges for all your account IDs subscribed to Enterprise Support.

80) A company has a database server that is always running. The company hosts the server on Amazon EC2 instances. The instance sizes are suitable for the workload. The workload will run for 1 year. Which EC2 instance purchasing option will meet these requirements MOST cost-effectively?

- A. Standard Reserved Instances
- B. On-Demand Instances
- C. Spot Instances
- D. Convertible Reserved Instances

Correct Answer: A

Standard Reserved Instance (RI) AWS offers the standard RI through the **one-year or the three-year term purchase plans**. AWS Standard RIs allow users to modify the scope, type of networking, Availability Zone and the type of instance (as long as the new instance is within the same instance type).

81) Which tasks are the responsibility of AWS, according to the AWS shared responsibility model? (Choose two.)

- A. Patch the Amazon EC2 guest operating system.
- B. Upgrade the firmware of the network infrastructure. Ans
- C. Apply password rotation for IAM users.
- D. Maintain the physical security of edge locations. Ans
- E. Maintain least privilege access to the root user account.

Correct Answer: *BD*

AWS responsibility “Security of the Cloud” - AWS is responsible for protecting the infrastructure that runs all of the services offered in the AWS Cloud. This infrastructure is composed of the hardware, software, networking, and facilities that run AWS Cloud services.

82) Which of the following are features of network ACLs as they are used in the AWS Cloud? (Choose two.)

- A. They are stateless.
- B. They are stateful.
- C. They evaluate all rules before allowing traffic.
- D. They process rules in order, starting with the lowest numbered rule, when deciding whether to allow traffic. Ans
- E. They operate at the instance level.

Correct Answer: AD

- Network ACLs are stateless, which means that responses to allowed inbound traffic are subject to the rules for outbound traffic (and vice versa).
- Evaluate the network ACL rules when traffic enters and leaves the subnet, not as it is routed within a subnet.

83) A company has designed its AWS Cloud infrastructure to run its workloads effectively. The company also has protocols in place to continuously improve supporting processes.
Which pillar of the AWS Well-Architected Framework does this scenario represent?

- A. Security
- B. Performance efficiency
- C. Cost optimization
- D. Operational excellence

Correct Answer: D

The Operational Excellence pillar includes the ability to support development and run workloads effectively, gain insight into their operations, and to continuously improve supporting processes and procedures to deliver business value.

84) Which of the following describes elasticity in the AWS Cloud? (Select two.)

- A. How quickly an Amazon EC2 instance can be restarted
- B. The ability to rightsize resources as demand shifts
- C. The maximum amount of RAM an Amazon EC2 instance can use
- D. The pay-as-you-go billing model
- E. How easily resources can be produced when they are needed

Correct Answer: BE

In **AWS**, the process of getting the resources dynamically when you actually require them and then release the resources when you are done and do not need them is known as **elasticity**. In another way, growing or shrinking the resources dynamically when needed is known as **Elasticity**.

85) After studying the AWS Cost and Usage report in the AWS Management Console, a Cloud Practitioner detects a billing problem.

Which course of action should be done to rectify this?

- A. Open a detailed case related to billing and submit it to AWS Support for help.
- B. Upload data describing the issue to a new object in a private Amazon S3 bucket.
- C. Create a pricing application and deploy it to a right-sized Amazon EC2 instance for more information.
- D. Proceed with creating a new dashboard in Amazon QuickSight.

Correct Answer: A

If you have an account or billing related question, do the following:

- 1.Sign in to your AWS account.
- 2.Open the AWS Support Center.
- 3.Choose Create case.
- 4.Select Account and billing support.
- 5.Enter the required information in the Case details section.

86) Which action, in terms of AWS Cloud architecture, is compatible with the concept of least privilege?

- A. Allow users the minimum access that is needed to do a task.
- B. Prevent managers from accessing important source code.
- C. Provide only the permissions that are needed for users to do their jobs in the current month.
- D. Assign permissions that are based on job titles.

Correct Answer: A

[Least privilege](#) is a principle of granting only the permissions required to complete a task. Least privilege is also one of many [Amazon Web Services \(AWS\) Well-Architected](#) best practices that can help you build securely in the cloud. For example, if you have an [Amazon Elastic Compute Cloud \(Amazon EC2\)](#) instance that needs to access an [Amazon Simple Storage Service \(Amazon S3\)](#) bucket to get configuration data, you should only allow read access to the specific S3 bucket that contains the relevant data.

87) Which of the following are customer duties under the AWS shared responsibility model? (Select two.)

- A. Setting up server-side encryption on an Amazon S3 bucket
- B. Amazon RDS instance patching
- C. Network and firewall configurations
- D. Physical security of data center facilities
- E. Compute capacity availability

Correct Answer: AC

Customers are responsible for **managing their data** (including encryption options), classifying their assets, and using IAM tools to apply the appropriate permissions. This customer/AWS shared responsibility model also extends to IT controls.

88) A company needs to graphically visualize AWS billing and usage over time. The company also needs information about its AWS monthly costs.

Which AWS Billing and Cost Management tool provides this data in a graphical format?

- A. AWS Bills
- B. Cost Explorer
- C. AWS Cost and Usage Report
- D. AWS Budgets

Correct Answer: B

AWS Cost Explorer is a graphical cost analysis tool available from the Billing and Cost Management console's menu. It uses the data from each month's spending for up to the last thirteen months and can forecast a spend pattern for the next three months. The spend graphs can be tailored for certain time periods as well.

89) A company wants to run production workloads on AWS. The company needs concierge service, a designated AWS technical account manager (TAM), and technical support that is available 24 hours a day, 7 days a week. Which AWS Support plan will meet these requirements?

- A. AWS Basic Support
- B. AWS Enterprise Support
- C. AWS Business Support
- D. AWS Developer Support

Correct Answer: B

AWS Enterprise Support provides you with concierge-like service where the main focus is helping you achieve your outcomes and find success in the cloud.

With Enterprise Support, you get 24x7 technical support from high-quality engineers, tools and technology to automatically manage health of your environment, consultative architectural guidance delivered in the context of your applications and use-cases, and a designated Technical Account Manager (TAM) to coordinate access to proactive / preventative programs and AWS subject matter experts. AWS Enterprise Support is recommended if you have business and/or mission critical workloads in AWS.

90) Which of the following tasks is the AWS customer's duty under the shared responsibility model? (Select two.)

- A. Ensuring that application data is encrypted at rest
- B. Ensuring that AWS NTP servers are set to the correct time
- C. Ensuring that users have received security training in the use of AWS services
- D. Ensuring that access to data centers is restricted
- E. Ensuring that hardware is disposed of properly

Correct Answer: AC

Cloud security operates on a **shared responsibility model** that defines the balance of security responsibilities of the cloud service provider (CSP) and of the cloud **customer**. Generally, it stipulates that the CSP is **responsible** for the security of the cloud and the **customer** is **responsible** for the security in the cloud.

91) Before transferring an environment to the AWS Cloud, a cloud practitioner must receive AWS compliance reports.

How are these reports produced?

- A. Contact the AWS Compliance team
- B. Download the reports from AWS Artifact
- C. Open a case with AWS Support
- D. Generate the reports with Amazon Macie

Correct Answer: B

AWS Artifact provides a central resource for AWS security and compliance reports. The artifacts available in AWS Artifact include Service Organization Control (SOC) reports, Payment Card Industry (PCI) reports, and certifications from accreditation bodies that validate the implementation and operating effectiveness of AWS security controls.

92) Which change management actions, according to the AWS Well-Architected Framework, should be followed to ensure AWS Cloud reliability? (Select two.)

- A. Use AWS Config to generate an inventory of AWS resources
- B. Use service limits to prevent users from creating or making changes to AWS resources
- C. Use AWS CloudTrail to record AWS API calls into an auditable log file
- D. Use AWS Certificate Manager to whitelist approved AWS resources and services
- E. Use Amazon GuardDuty to validate configuration changes made to AWS resources

Correct Answer: AC

AWS Config continually assesses, audits, and evaluates the configurations and relationships of your resources on AWS, on premises, and on other clouds.

AWS CloudTrail is an AWS service that helps you enable operational and risk auditing, governance, and compliance of your AWS account. Actions taken by a user, role, or an AWS service are recorded as events in CloudTrail. Events include actions taken in the AWS Management Console, AWS Command Line Interface, and AWS SDKs and APIs.

93) What may be associated to an Amazon EC2 instance through AWS Identity and Access Management (IAM) to initiate service requests?

- A. Group
- B. Role
- C. Policy
- D. Access key

Correct Answer: B

IAM role management

Q: What is an IAM role?

An IAM role is an IAM entity that defines a set of [permissions](#) for making AWS service requests. IAM roles are not associated with a specific user or group. Instead, trusted entities assume roles, such as IAM users, applications, or AWS services such as EC2.

Q: What problems do IAM roles solve?

IAM roles allow you to delegate access with defined permissions to trusted entities without having to share long-term access keys. You can use IAM roles to delegate access to IAM users managed within your account, to IAM users under a different AWS account, or to an AWS service such as EC2.

Q: How do I get started with IAM roles?

You create a role in a way similar to how you create a user—name the role and attach a policy to it. For details, see [Creating IAM Roles](#).

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94) Which of the following actions is the customer's responsibility under the AWS shared responsibility model? (Select two.)

- A. Patching operating system components for Amazon Relational Database Server (Amazon RDS)
- B. Encrypting data on the client-side
- C. Training the data center staff
- D. Configuring Network Access Control Lists (ACL)
- E. Maintaining environmental controls within a data center

Correct Answer: *BD*

Customer responsibility will be determined by the AWS Cloud services that a customer selects. This determines the amount of configuration work the customer must perform as part of their security responsibilities. For example, a service such as Amazon Elastic Compute Cloud (Amazon EC2) is categorized as Infrastructure as a Service (IaaS) and, as such, requires the customer to perform all of the necessary security configuration and management tasks.

95) Which architecture design principle describes the need to isolate failures between dependent components in the AWS Cloud?

- A. Use a monolithic design.
- B. Design for automation.
- C. Design for single points of failure.
- D. Loosely couple components.

Correct Answer: D

In the cloud practitioner course states that in a microservices approach, application components are loosely coupled. In this case, if a single component fails, the other components continue to work because they are communicating with each other. The loose coupling prevents the entire application from failing.

96) Which AWS services are managed database services? (Choose two.)

- A. Amazon Elastic Block Store (Amazon EBS)
- B. Amazon S3
- C. Amazon RDS
- D. Amazon Elastic File System (Amazon EFS)
- E. Amazon DynamoDB

Correct Answer: CE

fully managed AWS databases:

- Amazon RDS
- Amazon DocumentDB
- Amazon Keyspaces
- Amazon ElastiCache

97) Which AWS services or functionalities enable failover across several AWS Regions to ensure high availability and low latency? (Select two.)

- A. Amazon Route 53
- B. Network Load Balancer
- C. Amazon S3 Transfer Acceleration
- D. AWS Global Accelerator
- E. Application Load Balancer

Correct Answer: AD

Amazon Route 53 is a highly available and scalable [Domain Name System \(DNS\)](#) web service. Route 53 connects user requests to internet applications running on AWS or on-premises.

AWS Global Accelerator is a service in which you create *accelerators* to improve the performance of your applications for local and global users. Depending on the type of accelerator you choose, you can gain additional benefits:

- With a standard accelerator, you can improve availability of your internet applications that are used by a global audience. With a standard accelerator, Global Accelerator directs traffic over the AWS global network to endpoints in the nearest Region to the client.
- With a custom routing accelerator, you can map one or more users to a specific destination among many destinations.

98) Which of the following is a duty of AWS under the AWS shared responsibility model?

- A. Enabling server-side encryption for objects stored in S3
- B. Applying AWS IAM security policies
- C. Patching the operating system on an Amazon EC2 instance
- D. Applying updates to the hypervisor

Correct Answer: D

A hypervisor is a software that you can use to run multiple virtual machines on a single physical machine. Every virtual machine has its own operating system and applications. The hypervisor allocates the underlying physical computing resources such as CPU and memory to individual virtual machines as required. Thus, it supports the optimal use of physical IT infrastructure.

99) A copy of the AWS SOC 2 report is required during a compliance review by one of the auditors.

Which service should this request be sent through?

- A. AWS Personal Health Dashboard
- B. AWS Trusted Advisor
- C. AWS Artifact
- D. Amazon S3

Correct Answer: C

AWS Artifact provides on-demand downloads of AWS security and compliance documents, such as AWS ISO certifications, Payment Card Industry (PCI), and Service Organization Control (SOC) reports. You can submit the security and compliance documents (also known as *audit artifacts*) to your auditors or regulators to demonstrate the security and compliance of the AWS infrastructure and services that you use.

100) For 3 hours, 5 minutes, and 6 seconds, a client operates an Amazon Linux EC2 instance on-demand.

How long will the consumer be charged?

- A. 3 hours, 5 minutes
- B. 3 hours, 5 minutes, and 6 seconds
- C. 3 hours, 6 minutes
- D. 4 hours

Correct Answer: *B*

AWS offers you a **pay-as-you-go** approach for pricing for over 160 cloud services. With AWS you pay only for the individual services you need, for as long as you use them, and without requiring long-term contracts or complex licensing. AWS pricing is similar to how you pay for utilities like water and electricity.

101) A company is using the AWS Free Tier for several AWS services for an application. What will happen if the Free Tier usage period expires or if the application use exceeds the Free Tier usage limits?

- A. The company will be charged the standard pay-as-you-go service rates for the usage that exceeds the Free Tier usage.
- B. AWS Support will contact the company to set up standard service charges.
- C. The company will be charged for the services it consumed during the Free Tier period, plus additional charges for service consumption after the Free Tier period.
- D. The company's AWS account will be frozen and can be restarted after a payment plan is established.

Correct Answer: A

When your free tier expires or if your application use exceeds the free tier limits, you simply pay standard, pay-as-you-go service rates (see each service page for full pricing details)

102) Which AWS service uses machine learning to help discover, monitor, and protect sensitive data that is stored in Amazon S3 buckets?

- A. AWS Shield
- B. Amazon Macie
- C. AWS Network Firewall
- D. Amazon Cognito

Correct Answer: *B*

Amazon Macie is a data security and data privacy service that uses machine learning (ML) and pattern matching to discover and protect your sensitive data.

103) According to the AWS shared responsibility model, which of the following is exclusively the responsibility of AWS?

- A. Patching of the guest operating system
- B. Security awareness and training
- C. Physical and environmental controls
- D. Development of an IAM password policy

Correct Answer: C

According to AWS Shared Responsibility Model, AWS is responsible for the **Security of the Cloud** and the customer is responsible for the Security in the Cloud. AWS Responsibility: AWS is responsible for protecting the infrastructure that runs all the AWS services.

104) What can users do using AWS Marketplace? (Select two.)

- A. Sell unused Amazon EC2 Spot Instances.
- B. Sell solutions to other AWS users.
- C. Buy third-party software that runs on AWS.
- D. Purchase AWS security and compliance documents.
- E. Order AWS Snowball.

Correct Answer: BC

The AWS Marketplace enables qualified partners to market and sell their software to AWS Customers. AWS Marketplace is an online software store that helps customers find, buy, and immediately start using the software and services that run on AWS.

105) What are the possible uses for AWS edge locations? (Select two.)

- A. Hosting applications
- B. Delivering content closer to users
- C. Running NoSQL database caching services
- D. Reducing traffic on the server by caching responses
- E. Sending notification messages to end users

Correct Answer: *BD*

CloudFront delivers your content through a worldwide network of data centers called edge locations. When a user requests content that you're serving with

CloudFront, the user is routed to the edge location that provides the lowest latency (time delay), so that content is delivered with the best possible performance.

106) Amazon Elastic Container Service (Amazon ECS) and Amazon DynamoDB are used by a firm to execute its mission-critical web application. Multiple times during the day, the workload jumps to up to ten times the regular level.

Which AWS Cloud feature helps the business to adapt to these demand changes?

- A. Agility
- B. Global reach
- C. Scalability
- D. Security

Correct Answer: C

AWS EC2 Auto Scaling Servers can get more requests than they can handle. Too many requests can cause timeouts and outages. AWS EC2 Auto Scaling allows you to **add or remove EC2 instances automatically**. It automates the capacity to the demand.

107) A company wants to improve the overall availability and performance of its applications that are hosted on AWS. Which AWS service should the company use?

- A. Amazon Connect
- B. Amazon Lightsail
- C. AWS Global Accelerator
- D. AWS Storage Gateway

Correct Answer: C

AWS Global Accelerator is a networking service that improves the performance of your users' traffic by up to 60% using Amazon Web Services' global network infrastructure. When the internet is congested, AWS Global Accelerator optimizes the path to your application to keep packet loss, jitter, and latency consistently low.

108) Which of the following tasks is the customer's duty under the shared responsibility model? (Select two.)

- A. Maintaining the underlying Amazon EC2 hardware.
- B. Managing the VPC network access control lists.
- C. Encrypting data in transit and at rest.
- D. Replacing failed hard disk drives.
- E. Deploying hardware in different Availability Zones.

Correct Answer: BC

The hardware related jobs is the prime responsibility of AWS. VPC network access control lists is something a customer has to do himself to secure the applications. Encrypting data in transit and at rest is a shared responsibility in which AWS plays a part. All hardware related jobs have nothing to do with the customer.

109) Which of the following are AWS obligations, according to the AWS shared responsibility model? (Select two.)

- A. Network infrastructure and virtualization of infrastructure
- B. Security of application data
- C. Guest operating systems
- D. Physical security of hardware
- E. Credentials and policies

Correct Answer: AD

Physical security is one area where the [AWS Shared Responsibility Model](#) comes into play. AWS is responsible for protecting “security of the cloud” which includes the infrastructure of hardware, software, networking, and facilities that run AWS services.

110) What charges are included in the comparison of AWS vs on-premises Total Cost of Ownership (TCO)?

- A. Data center security
- B. Business analysis
- C. Project management
- D. Operating system administration

Correct Answer: A

Cloud TCO involves calculating the costs required to host, run, integrate, secure and manage workloads in the cloud over their lifetime. These include fees associated with the underlying infrastructure, such as compute, data transfer and storage. It also includes the cost of supporting cloud services, ranging from security and management tools to data analytics. Manpower costs for cloud engineers should also be part of a cloud TCO equation.

111) Which AWS service or feature identifies whether an Amazon S3 bucket or an IAM role has been shared with an external entity?

- A. AWS Service Catalog
- B. AWS Systems Manager
- C. AWS IAM Access Analyzer
- D. AWS Organizations

Correct Answer: C

Access Analyzer helps you identify the resources in your organization and accounts, such as Amazon S3 buckets or IAM roles, shared with an external entity. This lets you identify unintended access to your resources and data, which is a security risk.

112) Which AWS service supports MySQL and PostgreSQL as relational databases?

- A. Amazon Redshift
- B. Amazon DynamoDB
- C. Amazon Aurora
- D. Amazon Neptune

Correct Answer: C

AWS Aurora is a fully managed relational database optimized for use in AWS. It supports MySQL and PostgreSQL. With this service, you can combine the cost-effectiveness of open-source databases with increased availability and performance.

113) Which AWS services is natively supported by AWS Snowball Edge?

- A. AWS Server Migration Service (AWS SMS)
- B. Amazon Aurora
- C. AWS Trusted Advisor
- D. Amazon EC2

Correct Answer: D

- Snowball Edge devices have Amazon S3 and Amazon EC2 compatible endpoints available, enabling programmatic use cases.

114) Which AWS shared responsibility controls are shared? (Select two.)

- A. Awareness and training
- B. Patching of Amazon RDS
- C. Configuration management
- D. Physical and environmental controls
- E. Service and communications protection or security

Correct Answer: AC

Shared Controls – Controls which apply to both the infrastructure layer and customer layers, but in completely separate contexts or perspectives. In a shared control, AWS provides the requirements for the infrastructure and the customer must provide their own control implementation within their use of AWS services. Examples include:

- Patch Management – AWS is responsible for patching and fixing flaws within the infrastructure, but customers are responsible for patching their guest OS and applications.
- Configuration Management – AWS maintains the configuration of its infrastructure devices, but a customer is responsible for configuring their own guest operating systems, databases, and applications.
- Awareness & Training - AWS trains AWS employees, but a customer must train their own employees.

115) A company does not want to rely on elaborate forecasting to determine its usage of compute resources. Instead, the company wants to pay only for the resources that it uses. The company also needs the ability to increase or decrease its resource usage to meet business requirements.

Which pillar of the AWS Well-Architected Framework aligns with these requirements?

- A. Operational excellence
- B. Security
- C. Reliability
- D. Cost optimization

Correct Answer: D

Cost optimization is a continual process of refinement and improvement over the span of a workload's lifecycle. The practices in this paper help you build and operate cost-aware workloads that achieve business outcomes while minimizing costs and allowing your organization to maximize its return on investment.



116) After a single Availability Zone service disruption, a corporation must guarantee that the endpoint for a database instance stays the same. The program must continue database operations without human intervention from an administrator.

How are these stipulations to be met?

- A. Use multiple Amazon Route 53 routes to the standby database instance endpoint hosted on AWS Storage Gateway.
- B. Configure Amazon RDS Multi-Availability Zone deployments with automatic failover to the standby.
- C. Add multiple Application Load Balancers and deploy the database instance with AWS Elastic Beanstalk.
- D. Deploy a single Network Load Balancer to distribute incoming traffic across multiple Amazon CloudFront origins.

Correct Answer: B

Multi-AZ deployments can have one standby or two standby DB instances. When the deployment has one standby DB instance, it's called a *Multi-AZ DB instance deployment*. A Multi-AZ DB instance deployment has one standby DB instance that provides failover support, but doesn't serve read traffic. When the deployment has two standby DB instances, it's called a *Multi-AZ DB cluster deployment*. A Multi-AZ DB cluster deployment has standby DB instances that provide failover support and can also serve read traffic.

117) Which costs must be addressed when comparing AWS Cloud vs on-premises Total Cost of Ownership? (Select two.)

- A. Software development
- B. Project management
- C. Storage hardware
- D. Physical servers
- E. Antivirus software license

Correct Answer: CD

To get the most out of your estimates, you should have a good idea of your basic requirements. For example, if you're going to try Amazon Elastic Compute Cloud (Amazon EC2), it might help if you know what kind of operating system you need, what your memory requirements are, and how much I/O you need. You should also decide whether you need storage, such as if you're going to run a database and how long you intend to use the servers. You don't need to make these decisions before generating an estimate, though. You can play around with the service configuration and parameters to see which options fit your use case and budget best.

118) A company is migrating to the AWS Cloud. The company requires consultative review and guidance for its applications during the migration. After the migration is complete, the company requires a response within 30 minutes if business-critical systems go down.

Which AWS Support plans meet these requirements? (Choose two.)

- A. AWS Enterprise Support
- B. AWS Enterprise On-Ramp Support
- C. AWS Developer Support
- D. AWS Basic Support
- E. AWS Business Support

Correct Answer: AB

With Enterprise On-Ramp, you get 24x7 technical support from high-quality engineers, tools and technology to automatically manage health of your environment, consultative architectural guidance delivered in the context of your applications and use-cases, and a pool of Technical Account Managers (TAMs) to coordinate access to proactive / preventative programs and AWS subject matter experts.

119) Which AWS products anticipate future AWS expenses automatically?

- A. AWS Support Center
- B. AWS Total Cost of Ownership (TCO) Calculator
- C. AWS Simple Monthly Calculator
- D. Cost Explorer

Correct Answer: D

AWS Cost Explorer has an easy-to-use interface that lets you visualize, understand, and manage your AWS costs and usage over time.

120) Which functionality may be utilized to prevent inadvertent overwrites or deletions of Amazon S3 buckets?

- A. Lifecycle policy
- B. Object versioning
- C. Server-side encryption
- D. Bucket ACL

Correct Answer: B

S3 Object Versioning is one of the most salient features in Amazon S3. Object versioning is used to avoid unintended overwrite and deletion. Versioning is not enabled by default and this feature is used to keep multiple versions of objects at the same time in the bucket.

If we enable versioning on the bucket, we cannot delete an object directly. All versions remain in the bucket and a delete marker is introduced which becomes the current version. So if you need to delete an object, you need to remove that delete marker also. Existing objects in your bucket do not change and only future requests behavior changes. If we put an object retrieval request, the current version of the object will always return.

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121) Amazon DynamoDB is used by a business in its AWS Cloud architecture.

Which of the following is a duty of the organization, according to the AWS shared responsibility model? (Select two.)

- A. Operating system patching and upgrades
- B. Application of appropriate permissions with IAM tools
- C. Configuration of data encryption options
- D. Creation of DynamoDB endpoints
- E. Infrastructure provisioning and maintenance

Correct Answer: BC

Cloud security at AWS is the highest priority. As an AWS customer, you benefit from a data center and network architecture that is built to meet the requirements of the most security-sensitive organizations.

Security is a shared responsibility between AWS and AWS customer.

122) A company wants to launch its workload on AWS and requires the system to automatically recover from failure. Which pillar of the AWS Well-Architected Framework includes this requirement?

- A. Cost optimization
- B. Operational excellence
- C. Performance efficiency
- D. Reliability

Correct Answer: D

The reliability pillar includes the ability of a system to recover from infrastructure or service disruptions, dynamically acquire computing resources to meet demand, and mitigate disruptions such as misconfigurations or transient network issues.

123) Which AWS service should a company use to create a NoSQL database?

- A. Amazon Aurora
- B. Amazon DynamoDB
- C. Amazon Redshift
- D. Amazon Neptune

Correct Answer: *B*

AWS DynamoDB is a fully managed NoSQL database service that is designed to provide fast and predictable performance with seamless scalability. It is a good choice for companies looking to create a NoSQL database in AWS.

124) Which AWS service or functionality is utilized by distributed applications to send text and email messages?

- 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)

Correct Answer: 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, HTTPS endpoints, and Amazon Kinesis Data Firehose, for parallel processing. The A2P functionality enables you to send messages to users at scale via SMS, mobile push, and email.

125) To achieve high availability, how many Availability Zones should computing resources be provided across?

- A. A minimum of one
- B. A minimum of two
- C. A minimum of three
- D. A minimum of four or more

Correct Answer: *B*

High availability requires at least **two availability zones**. The idea is that only one zone will go down at a time: the proverbial backhoe cutting power and network cables. Since Amazon isolates the data centers for each availability zone, that backhoe won't take out more than one AZ.

126) Which of the following is AWS's obligation under the AWS shared responsibility model?

- A. Data encryption in transit
- B. Firmware updates on hardware
- C. Operating system patching on Amazon EC2 instances
- D. Data encryption at rest

Correct Answer: *B*

Under the **shared responsibility model**, AWS is responsible for the hardware and software that run AWS services. This applies to AWS Outposts, just as it does to an AWS Region. For example, AWS manages security patches, updates firmware, and maintains the Outpost equipment.

127) To boost availability, a user intends to create two more Amazon EC2 instances.

What should the user do?

- 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.

Correct Answer: A

AWS operates state-of-the-art, highly available data centers. Although rare, failures can occur that affect the availability of instances that are in the same location. If you host all of your instances in a single location that is affected by a failure, none of your instances would be available.

128) What are the customer's duties under the AWS shared responsibility model?
(Select two.)

- A. Physical and environmental security
- B. Physical network devices including firewalls
- C. Storage device decommissioning
- D. Security of data in transit
- E. Data integrity authentication

Correct Answer: DE

Customers' responsibility is the **security of everything they make in AWS Cloud**.
Customers (you) have complete control over your content. Customer manages AWS services, software, and access to the data.

129) A large enterprise with multiple VPCs in several AWS Regions around the world needs to connect and centrally manage network connectivity between its VPCs.

Which AWS service or feature meets these requirements?

- A. AWS Direct Connect
- B. AWS Transit Gateway
- C. AWS Site-to-Site VPN
- D. VPC endpoints

Correct Answer: B

AWS Transit Gateway connects your Amazon Virtual Private Clouds (VPCs) and on-premises networks through a central hub. This connection simplifies your network and puts an end to complex peering relationships. Transit Gateway acts as a highly scalable cloud router—each new connection is made only once.

Deliver applications around the world

Build, deploy, and manage applications across thousands of Amazon VPCs without having to manage peering connections or update routing tables.

130) Which AWS service should be used to monitor Amazon EC2 instances for CPU and network utilization?

- A. Amazon Inspector
- B. AWS CloudTrail
- C. Amazon CloudWatch
- D. AWS Config

Correct Answer: C

Using Amazon CloudWatch, which is a monitoring service provided by AWS. CloudWatch provides metrics and logs for ECS, such as CPU and memory usage for the container instances, the number of tasks and services running, and the number of containers that are being deployed or stopped.

131) How can customers minimize the amount of time they spend patching their operating systems by migrating to the AWS Cloud? (Select two.)

- A. Users can take advantage of managed services on AWS.
- B. Users can outsource operating system patching to the AWS Support team.
- C. AWS Professional Services will upgrade instances to the latest operating system versions.
- D. Users have the ability to use license-included Amazon EC2 instances.
- E. Users can take advantage of AWS Systems Manager features.

Correct Answer: AE

Patch Manager, a capability of AWS Systems Manager, automates the process of patching managed nodes with both security-related updates and other types of updates.

132) In the case of an environmental disruption, a company needs to make sure its infrastructure is structured for fault tolerance and business continuity.
Which parts of the AWS architecture should the organization replicate?

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

Correct Answer: C

AWS has the concept of a Region, which is a physical location around the world where we cluster data centers. We call each group of logical data centers an Availability Zone. Each AWS Region consists of a minimum of three, isolated, and physically separate AZs within a geographic area. Unlike other cloud providers, who often define a region as a single data center, the multiple AZ design of every AWS Region offers advantages for customers. Each AZ has independent power, cooling, and physical security and is connected via redundant, ultra-low-latency networks.

133) According to which AWS cloud design guideline, systems should minimize their interdependence?

- A. Scalability
- B. Services, not servers
- C. Removing single points of failure
- D. Loose coupling

Correct Answer: D

AWS helps loose coupled architecture that reduces interdependencies, a change or failure in a component does not cascade to other components

134) Which tasks need the root user credentials for an AWS account? (Select two.)

- A. Creating an Amazon EC2 key pair
- B. Removing an IAM user from the administrators group
- C. Changing the AWS Support plan
- D. Creating an Amazon CloudFront key pair
- E. Granting an IAM user full administrative access

Correct Answer: *CE*

There are only a few tasks that require you to use the root user:

- Change your account settings. This includes the account name, email address, root user password, and root user access keys.
- View certain tax invoices.
- Close your AWS account.
- Restore IAM user permissions.
- Change your AWS Support plan or Cancel your AWS Support plan.

135) A user wants to deploy a service to the AWS Cloud by using infrastructure-as-code (IaC) principles. Which AWS service can be used to meet this requirement?

- A. AWS Systems Manager
- B. AWS CloudFormation
- C. AWS CodeCommit
- D. AWS Config

Correct Answer: *B*

Use AWS CloudFormation templates: AWS CloudFormation is a service that helps you model and set up your Amazon Web Services resources, making it easier to manage and automate your infrastructure. With CloudFormation, you can define your infrastructure as code using templates written in JSON or YAML.

136) A company that has multiple business units wants to centrally manage and govern its AWS Cloud environments. The company wants to automate the creation of AWS accounts, apply service control policies (SCPs), and simplify billing processes. Which AWS service or tool should the company use to meet these requirements?

- A. AWS Organizations
- B. Cost Explorer
- C. AWS Budgets
- D. AWS Trusted Advisor

Correct Answer: A

AWS Organizations provides you with the capability to centrally manage and govern your cloud environment. You can manage and organize your accounts under a single bill, set central policies and configuration requirements for your entire organization, create custom permissions or capabilities within the organization, and delegate responsibilities to other accounts so they can manage on behalf of the organization.

In addition, AWS Organizations is integrated with other AWS services so you can define central configurations, security mechanisms, audit requirements, and resource sharing across accounts in your organization.

137) An administrator must fast install and begin utilizing a popular IT product.

- What resources are available to the administrator?
- A. AWS Well-Architected Framework documentation
 - B. Amazon CloudFront
 - C. AWS CodeCommit
 - D. AWS Quick Start reference deployments

Correct Answer: D

Quick Starts are built by AWS solutions architects and partners to help you deploy popular technologies on AWS, based on AWS best practices for security and high availability. These accelerators reduce hundreds of manual procedures into just a few steps, so you can build your production environment quickly and start using it immediately.

138) Which solution enables users in various AWS Regions to have the FASTEST application response times for frequently requested data?

- A. AWS CloudTrail across multiple Availability Zones
- B. Amazon CloudFront to edge locations
- C. AWS CloudFormation in multiple regions
- D. A virtual private gateway over AWS Direct Connect

Correct Answer: B

You can deliver content and decrease end-user latency of your web application using Amazon CloudFront. CloudFront speeds up content delivery by leveraging its global network of data centers, known as edge locations, to reduce delivery time by caching your content close to your end users. CloudFront fetches your content from an origin, such as an Amazon S3 bucket, an Amazon EC2 instance, an Amazon Elastic Load Balancing load balancer or your own web server, when it's not already in an edge location. CloudFront can be used to deliver your entire website or application, including dynamic, static, streaming, and interactive content.

139) Which qualities make AWS Cloud computing advantageous? (Select two.)

- A. A 100% service level agreement (SLA) for all AWS services
- B. Compute capacity that is adjusted on demand
- C. Availability of AWS Support for code development
- D. Enhanced security
- E. Increases in cost and complexity

Correct Answer: *BD*

Application availability is crucial for providing an error-free experience and for minimizing application latency. Availability depends on having resources that are accessible and have enough capacity to meet demand. AWS provides several mechanisms to manage availability. For applications hosted on Amazon ECS, these include autoscaling and Availability Zones (AZs). Autoscaling manages the number of tasks or instances based on metrics you define, while Availability Zones allow you to host your application in isolated but geographically-close locations.

140) A corporation anticipates a brief increase in internet traffic for their application. The program cannot be interrupted during the traffic spike. In addition, the organization must reduce costs while increasing flexibility. To achieve these needs, which Amazon EC2 instance type should the organization use?

- A. On-Demand Instances
- B. Spot Instances
- C. Reserved Instances
- D. Dedicated Hosts

Correct Answer: A

AWS On-Demand Instances (**Amazon Web Services On-Demand Instances**) are virtual servers that run in AWS Elastic Compute Cloud (EC2) or AWS Relational Database Service (RDS) and are purchased at a fixed rate per hour. AWS recommends using On-Demand Instances for applications with short-term, irregular workloads that cannot be interrupted.

141) Which IT controls do AWS and the customer share, according to the AWS shared responsibility model? (Choose two.)

- A. Physical and environmental controls
- B. Patch management
- C. Cloud awareness and training
- D. Zone security
- E. Application data encryption

Correct Answer: BC

Examples of shared controls include:

- **Patch Management** – AWS is responsible for patching and fixing flaws within the infrastructure, but customers are responsible for patching their guest OS and applications.
- **Configuration Management** – AWS maintains the configuration of its infrastructure devices, but a customer is responsible for configuring their own guest operating systems, databases, and applications.
- **Awareness & Training** – AWS trains AWS employees, but a customer must train their own employees.

142) A company is launching an application in the AWS Cloud. The application will use Amazon S3 storage. A large team of researchers will have shared access to the data. The company must be able to recover data that is accidentally overwritten or deleted.

Which S3 feature should the company turn on to meet this requirement?

- A. Server access logging
- B. S3 Versioning
- C. S3 Lifecycle rules
- D. Encryption in transit and at rest

Correct Answer: B

Versioning-enabled buckets can help you recover objects from accidental deletion or overwrite. For example, if you delete an object, Amazon S3 inserts a delete marker instead of removing the object permanently. The delete marker becomes the current object version. If you overwrite an object, it results in a new object version in the bucket. You can always restore the previous version.

143) An Amazon RDS database instance is deployed across several Availability Zones.

Which pillar of the AWS Well-Architected Framework is included in this strategy?

- A. Performance efficiency
- B. Reliability
- C. Cost optimization
- D. Security

Correct Answer: B

The Reliability pillar includes the ability of a workload to perform its intended function correctly and consistently when it's expected to. This includes the ability to operate and test the workload through its total lifecycle.

144) Which of the following are benefits of migrating to the AWS Cloud? (Choose two.)

- A. Operational resilience
- B. Discounts for products on Amazon.com
- C. Business agility
- D. Business excellence
- E. Increased staff retention

Correct Answer: AC

Operational resilience: The AWS Cloud is designed to be highly available and scalable, which can help organizations improve their operational resilience and reduce the impact of failures or disruptions.

Business agility: Migrating to the AWS Cloud can help organizations to increase their business agility by allowing them to quickly and easily deploy new applications and services, scale their infrastructure up or down as needed, and experiment with new technologies.

145) According to the AWS shared responsibility model, which job is the customer's duty?

- A. Maintain the security of the AWS Cloud.
- B. Configure firewalls and networks.
- C. Patch the operating system of Amazon RDS instances.
- D. Implement physical and environmental controls.

Correct Answer: B

The customer assumes responsibility and management of the guest operating system (including updates and security patches), other associated application software as well as the configuration of the AWS provided security group firewall. Customers should carefully consider the services they choose as their responsibilities vary depending on the services used, the integration of those services into their IT environment, and applicable laws and regulations. The nature of this shared responsibility also provides the flexibility and customer control that permits the deployment.

146) On Amazon EC2, a business hosts a web application in a Docker container.

Which of the following duties is AWS in charge of?

- A. Scaling the web application and services developed with Docker
- B. Provisioning or scheduling containers to run on clusters and maintain their availability
- C. Performing hardware maintenance in the AWS facilities that run the AWS Cloud
- D. Managing the guest operating system, including updates and security patches

Correct Answer: C

AWS is responsible for protecting the infrastructure that runs all of the services offered in the AWS Cloud. This infrastructure is composed of the hardware, software, networking, and facilities that run AWS Cloud services.

147) What are the AWS Cloud's advantages? (Select two.)

- A. Fixed rate monthly cost
- B. No need to guess capacity requirements
- C. Increased speed to market
- D. Increased upfront capital expenditure
- E. Physical access to cloud data centers

Correct Answer: BC

Eliminate guessing on your infrastructure capacity needs. When you make a capacity decision prior to deploying an application, you often end up either sitting on expensive idle resources or dealing with limited capacity. With cloud computing, these problems go away. You can access as much or as little capacity as you need, and scale up and down as required with only a few minutes' notice.

In a cloud computing environment, new IT resources are only a click away, which means that you reduce the time to make those resources available to your developers from weeks to just minutes. This results in a dramatic increase in agility for the organization, since the cost and time it takes to experiment and develop is significantly lower.

148) An Elastic Load Balancer, numerous Amazon EC2 instances, and Amazon RDS are used to run a web application on AWS.

Which security measures are AWS's responsibility? (Select two.)

- A. Running a virus scan on EC2 instances
- B. Protecting against IP spoofing and packet sniffing
- C. Installing the latest security patches on the RDS instance
- D. Encrypting communication between the EC2 instances and the Elastic Load Balancer
- E. Configuring a security group and a network access control list (NACL) for EC2 instances

Correct Answer: BC

AWS is responsible for protecting the infrastructure that runs AWS services in the AWS Cloud. AWS also provides you with services that you can use securely. Third-party auditors regularly test and verify the effectiveness of our security as part of the AWS compliance programs.

149) A manufacturing company has a critical application that runs at a remote site that has a slow internet connection. The company wants to migrate the workload to AWS. The application is sensitive to latency and interruptions in connectivity. The company wants a solution that can host this application with minimum latency. Which AWS service or feature should the company use to meet these requirements?

- A. Availability Zones
- B. AWS Local Zones
- C. AWS Wavelength
- D. AWS Outposts

Correct Answer: *B*

AWS Local Zones are a type of infrastructure deployment that places compute, storage, database, and other select AWS services close to large population and industry centers.

Run low-latency applications at the edge

Build and deploy applications close to end users to enable real-time gaming, live streaming, augmented and virtual reality (AR/VR), virtual workstations, and more.

150) Which AWS service or feature facilitates the purchase and deployment of third-party software by providing an online, managed software catalog?

- A. AWS Support
- B. AWS Marketplace
- C. Amazon EC2 private Amazon Machine Images (AMIs)
- D. AWS reseller programs

Correct Answer: B

AWS Marketplace is a curated digital catalog that makes it easy for customers to find, buy, deploy, and manage the third-party software.

151) A business wishes to improve its capacity for infrastructure recovery in the event of a natural catastrophe.

This capability corresponds to which pillar of the AWS Well-Architected Framework?

- A. Cost optimization
- B. Performance efficiency
- C. Reliability
- D. Security

Correct Answer: C

There are five design principles for reliability in the cloud:

- Automatically recover from failure**
- Test recovery procedures**
- Scale horizontally to increase aggregate workload availability**
- Stop guessing capacity**
- Manage change in automation**

152) A business may be required to operate its workload exclusively in its on-premises data center due to performance and regulatory limitations.

Which Amazon Web Services (AWS) services or resources should the business utilize? (Select two.)

- A. Amazon Pinpoint
- B. Amazon WorkLink
- C. AWS Outposts
- D. AWS Snowball Edge
- E. AWS AppSync

Correct Answer: CD

AWS Outposts is a family of fully managed solutions delivering AWS infrastructure and services to virtually any on-premises or edge location for a truly consistent hybrid experience. Outposts solutions allow you to extend and run native AWS services on premises, and is available in a variety of form factors, from 1U and 2U Outposts servers to 42U Outposts racks, and multiple rack deployments.

AWS Snowball Edge is a type of Snowball device with on-board storage and compute power for select AWS capabilities. Snowball Edge can do local processing and edge-computing workloads in addition to transferring data between your local environment and the AWS Cloud.

153) For security reasons, a business demands an isolated environment inside AWS.

Which course of action is necessary to achieve this?

- A. Create a separate Availability Zone to host the resources.
- B. Create a separate VPC to host the resources.
- C. Create a placement group to host the resources.
- D. Create an AWS Direct Connect connection between the company and AWS.

Correct Answer: B

Network isolation

A virtual private cloud (VPC) is a virtual network in your own logically isolated area in the AWS Cloud. Use separate VPCs to isolate infrastructure by workload or organizational entity.

A subnet is a range of IP addresses in a VPC. When you launch an instance, you launch it into a subnet in your VPC. Use subnets to isolate the tiers of your application (for example, web, application, and database) within a single VPC. Use private subnets for your instances if they should not be accessed directly from the internet.

To call the Amazon EC2 API from your VPC without sending traffic over the public internet, use AWS PrivateLink.

154) How do Amazon's massive economies of scale help customers?

- A. Periodic price reductions as the result of Amazon's operational efficiencies
- B. New Amazon EC2 instance types providing the latest hardware
- C. The ability to scale up and down when needed
- D. Increased reliability in the underlying hardware of Amazon EC2 instances

Correct Answer: A

•**Benefit from massive economies of scale** – By using cloud computing, you can achieve a lower variable cost than you can get on your own. Because usage from hundreds of thousands of customers is aggregated in the cloud, providers such as AWS can achieve higher economies of scale, which translates into lower pay-as-you-go prices.

155) A company wants to implement threat detection on its AWS infrastructure. However, the company does not want to deploy additional software.

Which AWS service should the company use to meet these requirements?

- A. Amazon VPC
- B. Amazon EC2
- C. Amazon GuardDuty
- D. AWS Direct Connect

Correct Answer: C

Amazon GuardDuty

1. Continuously monitor your AWS accounts, instances, container workloads, users, and storage for potential threats.
2. Expose threats quickly using anomaly detection, machine learning, behavioral modeling, and threat intelligence feeds from AWS and leading third-parties.
3. Mitigate threats early by initiating automated responses.

156) Which AWS service uses edge locations?

- A. Amazon Aurora
- B. AWS Global Accelerator
- C. Amazon Connect
- D. AWS Outposts

Correct Answer: B

AWS Global Accelerator and Amazon CloudFront are separate services that use the AWS global network and its edge locations around the world.

157) When utilizing the AWS Command Line Interface (AWS CLI), which of the following Identity and Access Management (IAM) entities is connected with an access key ID and secret access key?

- A. IAM group
- B. IAM user
- C. IAM role
- D. IAM policy

Correct Answer: B

Access keys are long-term credentials for an IAM user or the AWS account root user. You can use access keys to sign programmatic requests to the AWS CLI or AWS API (directly or using the AWS SDK).

158) What is AWS's sole obligation under the AWS shared responsibility model?

- A. Application security
- B. Edge location management
- C. Patch management
- D. Client-side data

Correct Answer: B

Client-side data, application security is the sole responsibility of the customer. Patch management is a shared responsibility. That leaves us with edge location management and since this is out of the control of the customer, AWS is the one responsible for it.

159) Which component of the AWS architecture permits global computing and storage deployment?

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

Correct Answer: B

The AWS Cloud spans 99 Availability Zones within 31 geographic regions around the world, with announced plans for 12 more Availability Zones and 4 more AWS Regions in Canada, Israel, New Zealand, and Thailand.

160) Which of the following is a design concept associated with dependability in the AWS Well-Architected Framework?

- A. Deployment to a single Availability Zone
- B. Ability to recover from failure
- C. Design for cost optimization
- D. Perform operations as code

Correct Answer: B

3. Reliability

The Reliability pillar encompasses the ability of a workload to perform its intended function correctly and consistently when it's expected to. This includes the ability to operate and test the workload through its total lifecycle. You can find prescriptive guidance on implementation in the [Reliability Pillar whitepaper](#).

Design Principles

There are five design principles for reliability in the cloud:

- Automatically recover from failure
- Test recovery procedures
- Scale horizontally to increase aggregate workload availability
- Stop guessing capacity
- Manage change in automation

161) Which activity is entirely the user's responsibility while executing workloads on AWS?

- A. Patching the infrastructure components
- B. Implementing controls to route application traffic
- C. Maintaining physical and environmental controls
- D. Maintaining the underlying infrastructure components

Correct Answer: B

Customer responsibility will be determined by the AWS Cloud services that a customer selects. This determines the amount of configuration work the customer must perform as part of their security responsibilities. For example, a service such as Amazon Elastic Compute Cloud (Amazon EC2) is categorized as Infrastructure as a Service (IaaS) and, as such, requires the customer to perform all of the necessary security configuration and management tasks. Customers that deploy an Amazon EC2 instance are responsible for management of the guest operating system (including updates and security patches), any application software or utilities installed by the customer on the instances, and the configuration of the AWS-provided firewall (called a security group) on each instance. For abstracted services, such as Amazon S3 and Amazon DynamoDB, AWS operates the infrastructure layer, the operating system, and platforms, and customers access the endpoints to store and retrieve data. Customers are responsible for managing their data (including encryption options), classifying their assets, and using IAM tools to apply the appropriate permissions.

162) Which statement best describes the AWS Cloud's agility?

- A. Agility gives users the ability to host applications in multiple AWS Regions around the world.
- B. Agility gives users the ability to pay upfront to reduce cost.
- C. Agility provides customizable physical hardware at the lowest possible cost.
- D. Agility provides the means for users to provision resources in minutes.

Correct Answer: D

In a cloud computing environment, new IT resources are only a click away, which means that you reduce the time to make those resources available to your developers from weeks to just minutes. This results in a dramatic increase in agility for the organization, since the cost and time it takes to experiment and develop is significantly lower.

163) Which AWS product or service enables businesses to monitor and classify their expenditure at a precise level?

- A. Cost allocation tags
- B. Consolidated billing
- C. AWS Budgets
- D. AWS Marketplace

Correct Answer: A

AWS cost allocation tags are **labels for classifying, organizing, and identifying your resources**. These tags, which are key-value pairs, make it easier to manage them and track their usage. By assigning tags to your resources, you can track your overall AWS costs, either through Cost Explorer or through the AWS API.

164) What is Amazon CloudFront?

- A. A global content delivery network
- B. A web service to schedule regular data movement
- C. A development front-end to Amazon Web Services
- D. An encrypted endpoint to upload files to the cloud

Correct Answer: A

Amazon CloudFront is a global content delivery network (CDN) service that accelerates delivery of your websites, APIs, video content or other web assets through CDN caching. It integrates with other Amazon Web Services products to give developers and businesses an easy way to accelerate content to end users with no minimum usage commitments.

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

165) Which AWS service is responsible for monitoring the health of your applications automatically?

- A. Amazon API Gateway
- B. AWS Elastic Beanstalk
- C. AWS Lambda
- D. AWS Config

Correct Answer: B

With Elastic Beanstalk, you can quickly deploy and manage applications in the AWS Cloud without having to learn about the infrastructure that runs those applications. Elastic Beanstalk reduces management complexity without restricting choice or control. You simply upload your application, and Elastic Beanstalk automatically handles the details of capacity provisioning, load balancing, scaling, and application health monitoring.

166) A user is developing a service that adheres to the AWS Well-Architected Framework's operational excellence pillar.

Which design concept is the user to adhere to?

- A. Anticipate failure
- B. Make large-scale changes
- C. Perform manual operations
- D. Create static operational procedures

Correct Answer: A

1. Operational Excellence

The Operational Excellence pillar includes the ability to support development and run workloads effectively, gain insight into their operation, and continuously improve supporting processes and procedures to delivery business value. You can find prescriptive guidance on implementation in the [Operational Excellence Pillar whitepaper](#).

Design Principles

There are five design principles for operational excellence in the cloud:

- Perform operations as code
- Make frequent, small, reversible changes
- Refine operations procedures frequently
- Anticipate failure
- Learn from all operational failures

:el

167) When comparing AWS Total Cost of Ownership (TCO) to on-premises TCO, what charges are included?

- A. Project management
- B. Antivirus software licensing
- C. Data center security
- D. Software development

Correct Answer: C

Consider the following elements affecting cost:

- Data center facilities**—how much it costs to operate a data center. How much it costs to meet your power, cooling, and space requirements.
- Hardware and infrastructure**—determine the cost of hardware to support your on-premises applications. This includes physical servers, consumables, and spare parts.
- Software**—calculate your current software usage, such as the number of licenses and license costs.
- Personnel**—identify the manpower costs of everyone involved in managing the system, network, and database.
- Disaster recovery**—if you have a disaster recovery solution, how much it costs to maintain your site.
- Security**—estimate the total cost of protecting your systems. Consider all expenses, including physical security, firewalls, and security professionals.

168) Which AWS service or feature checks access policies and offers actionable recommendations to help users set secure and functional policies?

- A. AWS Systems Manager
- B. AWS IAM Access Analyzer
- C. AWS Trusted Advisor
- D. Amazon GuardDuty

Correct Answer: B

IAM Access Analyzer generates a finding for each instance of a resource-based policy that grants access to a resource within your zone of trust to a principal that is not within your zone of trust.

IAM Access Analyzer reports a security warning when your policy grants access to pass any role to any service, which is overly permissive. The security warning includes a recommendation that you scope down the permissions to pass specific role(s) instead.

169) Which design concept is fulfilled by adhering to the AWS Well-Architected Framework's dependability pillar?

- A. Vertical scaling
- B. Manual failure recovery
- C. Testing recovery procedures
- D. Changing infrastructure manually

Correct Answer: C

•**Test recovery procedures:** In an on-premises environment, testing is often conducted to prove that the workload works in a particular scenario. Testing is not typically used to validate recovery strategies. In the cloud, you can test how your workload fails, and you can validate your recovery procedures. You can use automation to simulate different failures or to recreate scenarios that led to failures before. This approach exposes failure pathways that you can test and fix before a real failure scenario occurs, thus reducing risk.

170) Which AWS service or functionality can assist a business in determining if it has publicly accessible Amazon S3 buckets?

- A. AWS Service Health Dashboard
- B. Amazon CloudWatch Logs
- C. AWS Trusted Advisor
- D. AWS Service Catalog

Correct Answer: C

Trusted Advisor can help improve the security of your AWS environment by suggesting foundational security best practices curated by security experts. Examples include identifying RDS security group access risk, exposed access keys, and unnecessary S3 bucket permissions.

171) Seasonal sales surges occur many times a year for an online retailer, most notably during the holidays. At other times of year, demand is lower. The corporation has difficulty forecasting the seasonal increase in infrastructure demand.

Which benefits of migrating to the AWS Cloud would be the most beneficial to the business? (Select two.)

- A. Global footprint
- B. Elasticity
- C. AWS service quotas
- D. AWS shared responsibility model
- E. Pay-as-you-go pricing

Correct Answer: BE

Benefits of migrating to the AWS Cloud

- Trade fixed expense for variable expense –Benefit from massive economies of scale –**
- Stop guessing capacity**
- Increase speed and agility**
- Stop spending money running and maintaining data centers -**
- Go global in minutes –**

172) Which concepts of AWS Cloud architecture may assist boost reliability?
(Select two.)

- A. Using monolithic architecture
- B. Measuring overall efficiency
- C. Testing recovery procedures
- D. Adopting a consumption model
- E. Automatically recovering from failure

Correct Answer: CE

- **Automatically recover from failure:** By monitoring a workload for key performance indicators (KPIs), you can trigger automation when a threshold is breached. These KPIs should be a measure of business value, not of the technical aspects of the operation of the service. This allows for automatic notification and tracking of failures, and for automated recovery processes that work around or repair the failure. With more sophisticated automation, it's possible to anticipate and remediate failures before they occur.
- **Test recovery procedures:** In an on-premises environment, testing is often conducted to prove that the workload works in a particular scenario. Testing is not typically used to validate recovery strategies. In the cloud, you can test how your workload fails, and you can validate your recovery procedures. You can use automation to simulate different failures or to recreate scenarios that led to failures before. This approach exposes failure pathways that you can test and fix before a real failure scenario occurs, thus reducing risk.

173) Which sort of storage does Amazon Elastic File System (Amazon EFS) and Amazon FSx provide?

- A. File storage
- B. Object storage
- C. Block storage
- D. Instance store

Correct Answer: A

Both these services provide file storage, the major difference being that FSx integrates with Windows environments.

174) Which AWS service enables customers to view AWS compliance control reports on-demand and self-service?

- A. AWS Config
- B. Amazon GuardDuty
- C. AWS Trusted Advisor
- D. AWS Artifact

Correct Answer: D

AWS Artifact provides a central resource for AWS security and compliance reports. The artifacts available in AWS Artifact include Service Organization Control (SOC) reports, Payment Card Industry (PCI) reports, and certifications from accreditation bodies that validate the implementation and operating effectiveness of AWS security controls. Additionally, AWS Artifact provides on-demand access to the security and compliance documents such as ISO certifications, and Service Organization Control (SOC) reports of the Independent Software Vendors (ISVs) who sell their products on AWS Marketplace.

175) What may aid in the evaluation of a cloud-based application? (Select two.)

- A. AWS Trusted Advisor
- B. AWS Professional Services
- C. AWS Systems Manager
- D. AWS Partner Network (APN)
- E. AWS Secrets Manager

Correct Answer: *BD*

Professional Services available in AWS Marketplace enables you to find and buy assessments, implementation, support, managed services, and training for third-party software and building on AWS. AWS Marketplace helps you find the software and associated services you need to innovate all in one place, simplifying procurement. You can discover complete business solutions and curated service offerings from independent software vendors and consulting partners, and select payment options and contract terms that fit your needs.

The **AWS Partner Network (APN)** is a global community of partners that leverages programs, expertise, and resources to build, market, and sell customer offerings.

176) Which AWS service enables expense control across numerous AWS accounts effectively?

- A. AWS Organizations
- B. AWS Trusted Advisor
- C. AWS Direct Connect
- D. Amazon Connect

Correct Answer: A

AWS Organizations provides you with the capability to centrally manage and govern your cloud environment. You can manage and organize your accounts under a single bill, set central policies and configuration requirements for your entire organization, create custom permissions or capabilities within the organization, and delegate responsibilities to other accounts so they can manage on behalf of the organization.

In addition, AWS Organizations is integrated with other AWS services so you can define central configurations, security mechanisms, audit requirements, and resource sharing across accounts in your organization.

177) A company's on-premises servers and the AWS Cloud need a dedicated network connection.

Which Amazon Web Services (AWS) service should be used?

- A. AWS VPN
- B. AWS Direct Connect
- C. Amazon API Gateway
- D. Amazon Connect

Correct Answer: B

You can use AWS Direct Connect to establish a private virtual interface from your on-premise network directly to your Amazon VPC, providing you with a private, high bandwidth network connection between your network and your VPC. With multiple virtual interfaces, you can even establish private connectivity to multiple VPCs while maintaining network isolation.

178) On-premises resources have been underused by a user.

Which AWS Cloud idea is optimal for resolving this issue?

- A. High availability
- B. Elasticity
- C. Security
- D. Loose coupling

Correct Answer: *B*

Most people, when thinking of cloud computing, think of the ease with which they can procure resources when needed. This is only one aspect to elasticity. The other aspect is to contract when they no longer need resources. Scale out and scale in. Scale up and scale down.

179) Which of the following advantages does Amazon Relational Database Service (Amazon RDS) provide over conventional database management?

- A. AWS manages the data stored in Amazon RDS tables.
- B. AWS manages the maintenance of the operating system. most voted
- C. AWS automatically scales up instance types on demand. not
- D. AWS manages the database type.

Correct Answer: B

Amazon RDS will make sure that the relational database software powering your deployment stays up to date with the latest patches. You can exert optional control over when and if your database instance is patched.

180) Service control policies (SCPs) manage permissions for which of the following?

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

Correct Answer: C

AWS Organizations provides you with the capability to centrally manage and govern your cloud environment. You can manage and organize your accounts under a single bill, set central policies and configuration requirements for your entire organization, create custom permissions or capabilities within the organization, and delegate responsibilities to other accounts so they can manage on behalf of the organization.

181) Which AWS service can be used to encrypt data at rest?

- A. Amazon GuardDuty
- B. AWS Shield
- C. AWS Security Hub
- D. AWS Key Management Service (AWS KMS)

Correct Answer: D

AWS Key Management Service (KMS) – AWS KMS is a managed service that enables easy creation and control of encryption keys used to encrypt data. KMS uses envelope encryption in which data is encrypted using a data key that is then encrypted using a master key. Master keys can also be used to encrypt and decrypt up to 4 kilobytes of data. In our solution, I use KMS encrypt/decrypt APIs to encrypt the encrypted file system's password. See more information about [envelope encryption](#).

182) A cloud practitioner has a seldom run data analysis job that can be stopped without causing damage.

Which Amazon EC2 purchase option should be utilized to maximize cost savings?

- A. On-Demand Instances
- B. Reserved Instances
- C. Spot Instances
- D. Dedicated Hosts

Correct Answer: C

AWS allows you to scale services for short-term usage and helping you reduce your bill. As Spot Instances can be reclaimed with a two minute warning when EC2 needs capacity back, Spot Instances are a great fit for fault-tolerant, stateless applications. Use Spot Instances to significantly lower your cost and increase the elasticity of your application.

183) What are the advantages of AWS Cloud service billing consolidation? (Select two.)

- A. Volume discounts
- B. A minimal additional fee for use
- C. One bill for multiple accounts
- D. Installment payment options
- E. Custom cost and usage budget creation

Correct Answer: AC

Consolidated billing has the following benefits:

- **One bill** – You get one bill for multiple accounts.
- **Easy tracking** – You can track the charges across multiple accounts and download the combined cost and usage data.
- **Combined usage** – You can combine the usage across all accounts in the organization to share the volume pricing discounts, Reserved Instance discounts, and Savings Plans. This can result in a lower charge for your project, department, or company than with individual standalone accounts. For more information, see [Volume discounts](#).
- **No extra fee** – Consolidated billing is offered at no additional cost.

184) Which Amazon EC2 instance type is necessary when a user wishes to use their current per-socket, per-core, or per-virtual machine software licenses on a Microsoft Windows server operating on AWS?

- A. Spot Instances
- B. Dedicated Instances
- C. Dedicated Hosts
- D. Reserved Instances

Correct Answer: C

Dedicated Hosts

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An Amazon EC2 Dedicated Host is a physical server with EC2 instance capacity fully dedicated to your use. Dedicated Hosts allow you to use your existing per-socket, per-core, or per-VM software licenses, including Windows Server, Microsoft SQL Server, SUSE, and Linux Enterprise Server.

For information about the configurations supported on Dedicated Hosts, see [Dedicated Hosts Configuration](#).



185) When users connect to a website with a worldwide consumer base, they report experiencing delay.

Which Amazon Web Services (AWS) offering will enhance the user experience by lowering latency?

- A. Amazon CloudFront
- B. AWS Direct Connect
- C. Amazon EC2 Auto Scaling
- D. AWS Transit Gateway

Correct Answer: A

CloudFront delivers your content through a worldwide network of data centers called edge locations. When a user requests content that you're serving with CloudFront, the request is routed to the edge location that provides the lowest latency (time delay), so that content is delivered with the best possible performance.

186) Which capabilities or services are available for monitoring an AWS account's charges and expenses? (Select two.)

- A. AWS Cost and Usage report
- B. AWS product pages
- C. AWS Simple Monthly Calculator
- D. Billing alerts and Amazon CloudWatch alarms
- E. AWS Price List API

Correct Answer: AD

With AWS Cost and Usage Reports (CUR), you can review, itemize, and organize the most comprehensive cost and usage data for your account.

You can monitor your estimated AWS charges by using Amazon CloudWatch. When you enable the monitoring of estimated charges for your AWS account, the estimated charges are calculated and sent several times daily to CloudWatch as metric data.

187) Which service enables users to store data in the Amazon Web Services cloud?

- A. Amazon EFS
- B. Amazon Redshift
- C. Amazon RDS
- D. Amazon VPC

Correct Answer: A

Amazon EFS is a fully managed service providing NFS shared file system storage for Linux workloads. Amazon EFS makes it quick and efficient to create and configure file systems. You needn't worry about managing file servers or storage, updating hardware, configuring software, or performing backups. In seconds, create a fully managed file system using the AWS Management Console, the AWS Command Line Interface (CLI), or an AWS SDK.

188) Which AWS service or product enables an organization to automate the delivery of application changes?

- A. Amazon AppFlow
- B. AWS CodeDeploy
- C. AWS PrivateLink
- D. Amazon EKS Distro

Correct Answer: B

AWS CodeDeploy is a fully managed deployment service that automates software deployments to various compute services, such as Amazon Elastic Compute Cloud (EC2), Amazon Elastic Container Service (ECS), AWS Lambda, and your on-premises servers. Use CodeDeploy to automate software deployments, eliminating the need for error-prone manual operations.

189) A corporation wishes to minimize the physical footprint of the computing resources used by developers to execute programs.

Which service would enable serverless architectures to address this need?

- A. Amazon Elastic Compute Cloud (Amazon EC2)
- B. AWS Lambda
- C. Amazon DynamoDB
- D. AWS CodeCommit

Correct Answer: B

AWS Lambda is a serverless, event-driven compute service that lets you run code for virtually any type of application or backend service without provisioning or managing servers. You can trigger Lambda from over 200 AWS services and software as a service (SaaS) applications, and only pay for what you use.

190) A Load Balancer Elastic enables online traffic to be distributed across multiple:

- A. AWS Regions.
- B. Availability Zones.
- C. Dedicated Hosts.
- D. Amazon S3 buckets.

Correct Answer: B

AWS Elastic Load Balancing (ELB) distributes incoming application **traffic** automatically across **multiple** targets such as containers, EC2 instances, and IP addresses in one or more **availability zones**. This distributes and balances how frontend traffic reaches backend servers and increases the fault tolerance and availability of user applications.

191) What is AWS Storage Gateway's purpose?

- A. It ensures on-premises data storage is 99.99999999% durable.
- B. It transports petabytes of data to and from AWS.
- C. It connects to multiple Amazon EC2 instances.
- D. It connects on-premises data storage to the AWS Cloud.

Correct Answer: D

Moving data to the cloud is not quite as simple as flipping a switch. For companies that have managed their own data centers or server rooms for decades, there are a few steps to consider -- and it's not always wise to pull the plug on an internal infrastructure quite so quickly. If a startup uses on-premise business servers and then experiences unexpected growth, abandoning those servers doesn't make sense (even if the long-term plan is to do exactly that). AWS Storage Gateway is a way to bridge this gap for companies of any size. It's a hybrid storage option that connects on-premise storage including age-old tape backup systems to the cloud in a way that also provides one console to access all storage configurations.

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192) How can a client anticipate future expenses associated with the operation of a new web application?

- A. Amazon Aurora Backtrack
- B. Amazon CloudWatch Billing Alarms
- C. AWS Simple Monthly Calculator
- D. AWS Cost and Usage report

Correct Answer: D

You can use Cost explorer which is part of Cost and Usage report to forecast future costs of running an application.

193) The term "fault tolerance" relates to the following:

- A. the ability of an application to accommodate growth without changing design
- B. how well and how quickly an application's environment can have lost data restored
- C. how secure your application is
- D. the built-in redundancy of an application's components

Correct Answer: D

AWS recommends connecting from **multiple data centers** for physical location redundancy. When designing remote connections, consider using redundant hardware and telecommunications providers.

194) Which AWS service enables conventional SQL queries against stored datasets straight from Amazon S3?

- A. AWS Glue
- B. AWS Data Pipeline
- C. Amazon CloudSearch
- D. Amazon Athena

Correct Answer: D

Amazon Athena is defined as an interactive query service that makes it easy to analyse data directly in Amazon Simple Storage Service (Amazon S3) using standard SQL. So, it's another SQL query engine for large data sets stored in S3. This is very similar to other SQL query engines, such as Apache Drill. But unlike Apache Drill, Athena is limited to data only from Amazon's own S3 storage service. However, Athena is able to query a variety of file formats, including, but not limited to CSV, Parquet, JSON, etc.

195) A startup is developing a new application that must be launched immediately. In the near future, the application criteria may need to be changed.

Which of the following is an AWS Cloud feature that would fulfill this particular requirement?

- A. Elasticity
- B. Reliability
- C. Performance
- D. Agility

Correct Answer: D

Cloud infrastructure provides more agility and responsiveness than traditional IT environments. This requires organizations to think differently about how they design, build, and manage applications.

196) Which characteristics are advantages of using the AWS Cloud? (Choose two.)

- A. A 100% service level agreement (SLA) for all AWS services
- B. Compute capacity that is adjusted on demand
- C. Availability of AWS Support for code development
- D. Enhanced security
- E. Increases in cost and complexity

Correct Answer: *BD*

Six advantages of cloud computing

- Trade fixed expense for variable expense –**
- Benefit from massive economies of scale –**
- Stop guessing capacity –**
- Increase speed and agility –**
- Stop spending money running and maintaining data centers –**
- Go global in minutes –**

197) A company wants to convert video files and audio files from their source format into a format that will play on smartphones, tablets, and web browsers.

Which AWS service will meet these requirements?

- A. Amazon Elastic Transcoder
- B. Amazon Comprehend
- C. AWS Glue
- D. Amazon Rekognition

Correct Answer: A

Amazon Elastic Transcoder lets you convert media files that you have stored in Amazon Simple Storage Service (Amazon S3) into media files in the formats required by consumer playback devices. For example, you can convert large, high-quality digital media files into formats that users can play back on mobile devices, tablets, web browsers, and connected televisions.

198) A company has several departments. Each department has its own AWS accounts for its applications. The company wants all AWS costs on a single invoice to simplify payment, but the company wants to know the costs that each department is incurring.

Which AWS tool or feature will provide this functionality?

- A. AWS Cost and Usage Reports
- B. Consolidated billing
- C. Savings Plans
- D. AWS Budgets

Correct Answer: *B*

Consolidated billing is a feature of AWS Organizations that allows a single AWS account to pay the bills for multiple AWS accounts. This can be useful for companies that have multiple AWS accounts, as it allows them to see all of their costs on a single invoice, while still being able to track the costs of each department separately.

199) A company wants to eliminate the need to guess infrastructure capacity before deployments. The company also wants to spend its budget on cloud resources only as the company uses the resources. Which advantage of the AWS Cloud matches the company's requirements?

- A. Reliability
- B. Global reach
- C. Economies of scale
- D. Pay-as-you-go pricing

Correct Answer: D

By using cloud computing, you can achieve a lower variable cost than you can get on your own. Because usage from hundreds of thousands of customers is aggregated in the cloud, providers such as AWS can achieve higher economies of scale, which translates into lower pay as-you-go prices.

200) Which AWS service must be enabled in order for the AWS Management Console to monitor all user account changes?

- A. AWS CloudTrail
- B. Amazon Simple Notification Service (Amazon SNS)
- C. VPC Flow Logs
- D. AWS CloudHSM

Correct Answer: A

AWS CloudTrail is a service that enables governance, compliance, operational auditing, and risk auditing of your AWS account. With CloudTrail, you can log, continuously monitor, and retain account activity related to actions across your AWS infrastructure. CloudTrail provides event history of your AWS account activity, including actions taken through the AWS Management Console, AWS SDKs, command line tools, and other AWS services. This event history simplifies security analysis, resource change tracking, and troubleshooting. In addition, you can use CloudTrail to detect unusual activity in your AWS accounts. These capabilities help simplify operational analysis and troubleshooting.

201) Recently, an ecommerce firm began using the AWS Cloud. Which security-related responsibilities fall within the purview of the business? (Select two.)

- A. Restrict who is allowed physical access to the hosts that run the company's Amazon EC2 instances.
- B. Install security patches on Amazon EC2 Linux instances.
- C. Choose to encrypt data at rest that is stored on Amazon S3.
- D. Wipe Amazon Elastic Block Store (Amazon EBS) volumes clean before they are decommissioned.
- E. Conduct database patching for Amazon RDS instances.

Correct Answer: BC

For abstracted services, such as Amazon S3 and Amazon DynamoDB, AWS operates the infrastructure layer, the operating system, and platforms, and customers access the endpoints to store and retrieve data. Customers are responsible for managing their data (including encryption options), classifying their assets, and using IAM tools to apply the appropriate permissions.

202) A business needs to guarantee that users of the AWS Management Console adhere to password complexity guidelines.

How can a business customize the difficulty of its passwords?

- A. Using an AWS IAM user policy
- B. Using an AWS Organizations service control policy (SCP)
- C. Using an AWS IAM account password policy most suitable
- D. Using an AWS Security Hub managed insight

Correct Answer: C

You can set a custom password policy on your Amazon Web Services account to specify complexity requirements and mandatory rotation periods for your IAM users' passwords. If you don't set a custom password policy, IAM user passwords must meet the default Amazon password policy.

203) Which AWS service would determine if a security group has granted unlimited access to a resource?

- A. AWS Trusted Advisor
- B. Amazon CloudWatch
- C. VPC Flow Logs
- D. AWS CloudTrail

Correct Answer: A

In the AWS Trusted Advisor, there are lots of controls for security configurations of your AWS resources, some examples are the following:

•**Security Groups — Specific Ports Unrestricted:** This control checks security groups for rules that allow unrestricted access to specific ports such as SSH and RDP. Unrestricted access increases opportunities for malicious activity (hacking, denial-of-service attacks, loss of data).

204) Which features are available to users while use AWS KMS?

- A. Create and manage AWS access keys for the AWS account root user
- B. Create and manage AWS access keys for an AWS account IAM user
- C. Create and manage keys for encryption and decryption of data
- D. Create and manage keys for multi-factor authentication

Correct Answer: C

AWS Key Management Service (AWS KMS) is an encryption and key management service scaled for the cloud. AWS KMS keys and functionality are used by other AWS services, and you can use them to protect data in your own applications that use AWS.

205) On Amazon EC2 instances, a business has installed various relational databases. Each month, the database software manufacturer publishes new security updates for databases that must be deployed.

Which method is the MOST EFFECTIVE for applying security patches?

- A. Connect to each database instance on a monthly basis, and download and apply the necessary security patches from the vendor.
- B. Enable automatic patching for the instances using the Amazon RDS console.
- C. In AWS Config, configure a rule for the instances and the required patch level.
- D. Use AWS Systems Manager to automate database patching according to a schedule.

Correct Answer: D

Patch Manager, a capability of AWS Systems Manager, automates the process of patching managed nodes with both security related and other types of updates. You can use Patch Manager to apply patches for both operating systems and applications. (On Windows Server, application support is limited to updates for applications released by Microsoft.) You can use Patch Manager to install Service Packs on Windows nodes and perform minor version upgrades on Linux nodes. You can patch fleets of Amazon Elastic Compute Cloud (Amazon EC2) instances, edge devices, or your on-premises servers and virtual machines (VMs) by operating system type.

206) A business is releasing a new application on AWS. The application will be hosted on an Amazon Elastic Compute Cloud (EC2) instance. Additional EC2 instances will be required as the demand grows.

Which AWS service or technology can the business utilize to deploy the required number of EC2 instances?

- A. Elastic Load Balancing
- B. Amazon EC2 Auto Scaling
- C. AWS App2Container (A2C)
- D. AWS Systems Manager

Correct Answer: B

Amazon EC2 Auto Scaling helps you ensure that you have the correct number of Amazon EC2 instances available to handle the load for your application. You create collections of EC2 instances, called *Auto Scaling groups*. You can specify the minimum number of instances in each Auto Scaling group, and Amazon EC2 Auto Scaling ensures that your group never goes below this size. You can specify the maximum number of instances in each Auto Scaling group, and Amazon EC2 Auto Scaling ensures that your group never goes above this size.

207) What does it mean to provide AWS IAM users the fewest possible privileges?

- A. It is granting permissions to a single user only.
- B. It is granting permissions using AWS IAM policies only.
- C. It is granting AdministratorAccess policy permissions to trustworthy users.
- D. It is granting only the permissions required to perform a given task.

Correct Answer: D

When you create IAM policies, follow the standard security advice of granting least privilege, or granting only the permissions required to perform a task.

Determine what users (and roles) need to do and then craft policies that allow them to perform only those tasks.

208) When building an Amazon Relational Database Service (Amazon RDS) instance in Multiple Availability Zone mode, which architectural concept is followed?

- A. Implement loose coupling.
- B. Design for failure.
- C. Automate everything that can be automated.
- D. Use services, not servers.

Correct Answer: B

Amazon RDS Multi-AZ deployments provide enhanced availability and durability for Database (DB) Instances, making them a natural fit for production database workloads. When you provision a Multi-AZ DB Instance, Amazon RDS automatically creates a primary DB Instance and synchronously replicates the data to a standby instance in a different Availability Zone (AZ). Each AZ runs on its own physically distinct, independent infrastructure, and is engineered to be highly reliable. In case of an infrastructure failure, Amazon RDS performs an automatic failover to the standby (or to a read replica in the case of Amazon Aurora), so that you can resume database operations as soon as the failover is complete. Since the endpoint for your DB Instance remains the same after a failover, your application can resume database operation without the need for manual administrative intervention.

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209) What is a user's responsibility while using the AWS Cloud to execute an application?

- A. Managing physical hardware
- B. Updating the underlying hypervisor
- C. Providing a list of users approved for data center access
- D. Managing application software updates

Correct Answer: *D*

The customer assumes responsibility and management of the guest operating system (including updates and security patches), other associated application software as well as the configuration of the AWS provided security group firewall. Customers should carefully consider the services they choose as their responsibilities vary depending on the services used, the integration of those services into their IT environment, and applicable laws and regulations.

210) Which of the following statements concerning AWS's worldwide infrastructure is true?

- 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.

Correct Answer: C

AWS provides a more extensive global footprint than any other cloud provider, and to support its global footprint and ensure customers are served across the world, AWS opens new Regions rapidly. AWS maintains multiple geographic Regions, including Regions in North America, South America, Europe, China, Asia Pacific, South Africa, and the Middle East.

211) A business wishes to link AWS to its corporate network through a private network connection.

Which Amazon Web Services (AWS) service or functionality will satisfy this requirement?

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

Correct Answer: C

•AWS Direct Connect is a **cloud service solution** that makes it easy to establish a dedicated network connection from your premises to AWS. Using AWS Direct Connect, you can establish private connectivity between AWS and your datacenter, office, or colocation environment, which in many cases can reduce your network costs, increase bandwidth throughput, and provide a more consistent network experience than Internet-based connections.

212) Which of the following may be used to restrict certain users' access to Amazon Simple Storage Service (Amazon S3) buckets?

- A. A public and private key-pair
- B. Amazon Inspector
- C. AWS Identity and Access Management (IAM) policies
- D. Security Groups

Correct Answer: C

To allow users to perform S3 actions on the bucket from the VPC endpoints or IP addresses, you must explicitly grant those user-level permissions. You can grant user-level permissions on either an AWS Identity and Access Management (IAM) policy or another statement in the bucket policy.

213) Which of the following is an AWS Well-Architected Framework design principle?

- A. Reduce downtime by making infrastructure changes infrequently and in large increments.
- B. Invest the time to configure infrastructure manually.
- C. Learn to improve from operational failures.
- D. Use monolithic application design for centralization.

Correct Answer: C

Learn from all operational failures: Drive improvement through lessons learned from all operational events and failures. Share what is learned across teams and through the entire organization.



214) Which AWS service enables a business to identify and reroute customers to other servers in the event of a website server outage?

- A. Amazon CloudFront
- B. Amazon GuardDuty
- C. Amazon Route 53
- D. AWS Trusted Advisor

Correct Answer: C

Amazon Route 53 - Set routing policies to pre-determine and automate responses in case of failure, like redirecting traffic to alternative Availability Zones or Regions.

215) A organization with an AWS Support plan for developers established an Amazon RDS database but is unable to connect to it.

To get this degree of help, who should the developer contact?

- A. AWS Support using a support case
- B. AWS Professional Services
- C. AWS technical account manager
- D. AWS consulting partners

Correct Answer: A

Customers with a Developer Support plan have access to these additional features:

- Best practice guidance
- Client-side diagnostic tools
- Building-block architecture support: guidance on how to use AWS products, features, and services together
- Supports an unlimited number of support cases that can be opened by one primary contact, which is the AWS account *root user*.

216) Which AWS service enables you to monitor and debug distributed applications end-to-end?

- A. AWS Cloud9
- B. AWS CodeStar
- C. AWS Cloud Map
- D. AWS X-Ray

Correct Answer: D

AWS X-Ray is a **powerful tool offered by Amazon that enables developers to debug production and distributed applications**, especially in the microservices architecture. By analyzing the performance of the application and its underlying services, developers can identify root causes of performance issues to quickly resolve them.

217) Which AWS shared responsibility model duties are the customer's responsibility? (Select two.)

- A. Infrastructure facilities access management
- B. Cloud infrastructure hardware lifecycle management
- C. Configuration management of user's applications
- D. Networking infrastructure protection
- E. Security groups configuration

Correct Answer: CE

The customer is responsible for the security configuration or firewall (like security groups), Identity and Access Management (IAM), client and server-side encryption and customer data. Now, apart from AWS services, AWS Shared Responsibility also extends to IT controls.

218) Which AWS Cloud service gives tips on how to optimize an AWS account's performance?

- A. Amazon Inspector
- B. AWS Trusted Advisor
- C. Amazon CloudWatch
- D. AWS CloudTrail

Correct Answer: B

AWS Trusted Advisor provides recommendations that help you follow AWS best practices. Trusted Advisor evaluates your account by using checks. These checks identify ways to optimize your AWS infrastructure, improve security and performance, reduce costs, and monitor service quotas.

219) Which variables impact AWS Cloud costs? (Select two.)

- A. The number of unused AWS Lambda functions
- B. The number of configured Amazon S3 buckets
- C. Inbound data transfers without acceleration
- D. Outbound data transfers without acceleration
- E. Compute resources that are currently in use

Correct Answer: *DE*

Charges may apply if there is data transfer between different components of your workload. These charges vary depending on where the components are deployed.

220) A corporation is required by law to track and assess configuration changes to AWS resources, as well as to conduct corrective steps.
Which Amazon Web Services (AWS) service should the business use?

- A. AWS Config
- B. AWS Secrets Manager
- C. AWS CloudTrail
- D. AWS Trusted Advisor

Correct Answer: A

[AWS Config](#) continuously monitors and records your AWS resource configurations. You can use the service to automate the evaluation and remediation of recorded configurations against desired configurations. You also can review changes in configurations and relationships between AWS resources and dive into the history of a resource configuration.

221) Which AWS service should be utilized to store data backups for an extended period of time at a reasonable cost?

- A. Amazon RDS
- B. Amazon Glacier
- C. AWS Snowball
- D. AWS EBS

Correct Answer: B

Explanation -

Amazon S3 Glacier is a secure, durable, and low-cost storage class of S3 for data archiving and long-term backup. Customers can store large or small amounts of data for as little as \$0.004 per gigabyte per month. The S3 Glacier storage class is ideal for archives where data is regularly retrieved and some of the data may be needed in minutes.

Amazon RDS is a relational database service that hosts databases. It helps you create and manage databases.

Amazon Snowball is a petabyte-scale data transfer service that provides cost efficient data transfer to AWS from tamper proof physical devices. Similarly, Elastic block storage offers persistent block storage volumes for EC2 instances.

222) What does the AWS Cloud bring clients in terms of increased execution speed and agility? (Select two.)

- A. Readily available resources with low provisioning times
- B. Scalable compute capacity
- C. Free Tier services usage
- D. Access to AWS data centers
- E. Lower resource provisioning cost

Correct Answer: AB

In a cloud computing environment, new IT resources are only a click away, which means that you reduce the time to make those resources available to your developers from weeks to just minutes. This results in a dramatic increase in agility for the organization, since the cost and time it takes to experiment and develop is significantly lower.

223) A retailer wishes to supply just the resources required to meet current demand.

Which cloud advantage is the organization attempting to accomplish with this objective?

- A. Reliability
- B. Global reach
- C. Scalability
- D. High availability

Correct Answer: C

AWS Auto Scaling lets you build scaling plans that automate how groups of different resources respond to changes in demand.

224) What storage capabilities does Amazon S3 Intelligent-Tiering provide?

- A. Payment flexibility by reserving storage capacity
- B. Long-term retention of data by copying the data to an encrypted Amazon Elastic Block Store (Amazon EBS) volume
- C. Automatic cost savings by moving objects between tiers based on access pattern changes
- D. Secure, durable, and lowest cost storage for data archival

Correct Answer: C

The S3 Intelligent-Tiering storage class delivers automatic storage cost savings in three low latency and high throughput access tiers. It also offers optional archive capabilities to help you get the lowest storage costs in the cloud for data that can be accessed in minutes to hours.

225) A business wishes to transfer its apps to an AWS VPC. These apps will need access to resources located on-premises.

Which combination of activities will allow the business to achieve this objective? (Select two.)

- A. Use the AWS Service Catalog to identify a list of on-premises resources that can be migrated.
- B. Build a VPN connection between an on-premises device and a virtual private gateway in the new VPC.
- C. Use Amazon Athena to query data from the on-premises database servers.
- D. Connect the company's on-premises data center to AWS using AWS Direct Connect.
- E. Leverage Amazon CloudFront to restrict access to static web content provided through the company's on-premises web servers.

Correct Answer: *BD*

AWS Direct Connect - Link your AWS and on-premises networks to build applications that span environments without compromising performance.

226) What is the most effective approach to link an on-premises network to numerous VPCs located in separate AWS Regions?

- A. Use AWS Direct Connect
- B. Use AWS VPN
- C. Use AWS Client VPN
- D. Use an AWS Transit Gateway

Correct Answer: D

AWS Transit Gateway connects your Amazon Virtual Private Clouds (VPCs) and on-premises networks through a central hub. This connection simplifies your network and puts an end to complex peering relationships. Transit Gateway acts as a highly scalable cloud router—each new connection is made only once.

227) Multiple Regions of the AWS Cloud are an example of:

- A. agility.
- B. global infrastructure.
- C. elasticity.
- D. pay-as-you-go pricing.

Correct Answer: B

The AWS Cloud spans 99 Availability Zones within 31 geographic regions around the world, with announced plans for 12 more Availability Zones and 4 more AWS Regions in Canada, Israel, New Zealand, and Thailand.



228) Which AWS service does Chef and Puppet utilize to automate configuration management?

- A. AWS Config
- B. AWS OpsWorks
- C. AWS CloudFormation
- D. AWS Systems Manager

Correct Answer: *B*

AWS OpsWorks for Chef Automate Chef Automate is an **enterprise level-platform** that provides actionable insights with enterprise scale and performance across your cloud architecture. AWS OpsWorks for Chef Automate is a managed way of launching a Chef Automate server in OpsWorks AWS.

OpsWorks for Puppet Enterprise lets you launch a Puppet Enterprise master in minutes, and lets AWS OpsWorks handle its operations, backups, restorations, and software upgrades. OpsWorks for Puppet Enterprise frees you to focus on core configuration management tasks, instead of managing a Puppet master.

229) A corporation want to remove the necessity for pre-deployment estimation of infrastructure capacity. Additionally, the corporation want to spend its money on cloud resources only when the resources are used.

Which AWS Cloud feature best meets your business's needs?

- A. Reliability
- B. Global reach
- C. Economies of scale
- D. Pay-as-you-go pricing

Correct Answer: D

The **on-demand pricing model is the true embodiment of Amazon's pay-as-you-go payment philosophy**. You have no upfront payments, which means you're not committing yourself over a long-term period. Amazon will charge you for the compute capacity by the hour, and you can increase or decrease usage depending on your application.

230) SQL injection attacks are being launched against an application from a variety of external locations.

Which AWS service or functionality can assist in automating response to these attacks?

- A. AWS WAF
- B. Security groups
- C. Elastic Load Balancer
- D. Network ACL

Correct Answer: A

AWS WAF makes it easy to **create rules that block common web exploits like SQL injection and cross site scripting**. AWS WAF allows you to create a centralized set of rules that you can deploy across multiple websites.

231) Which feature enables Amazon EC2 instances to be more elastic in response to changing workload demand?

- A. Resource groups
- B. Lifecycle policies
- C. Application Load Balancer
- D. Amazon EC2 Auto Scaling

Correct Answer: D

Support for monitoring the health of each service independently, as health checks are defined at the target group level and many CloudWatch metrics are reported at the target group level. Attaching a target group to an Auto Scaling group enables you to scale each service dynamically based on demand.

232) What time-saving benefits can Amazon Rekognition provide?

- A. Amazon Rekognition provides automatic watermarking of images.
- B. Amazon Rekognition provides automatic detection of objects appearing in pictures.
- C. Amazon Rekognition provides the ability to resize millions of images automatically.
- D. Amazon Rekognition uses Amazon Mechanical Turk to allow humans to bid on object detection jobs.

Correct Answer: B

Rekognition Image is an image recognition service that detects objects, scenes, and faces; extracts text; recognizes celebrities; and identifies inappropriate content in images. It also allows you to search and compare faces. Rekognition Image is based on the same proven, highly scalable, deep learning technology developed by Amazon's computer vision scientists to analyze billions of images daily for Prime Photos.

233) A corporation want to migrate petabytes of data from on-premises sites to the AWS Cloud as rapidly as feasible.

Which Amazon Web Services (AWS) service should the business use?

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

Correct Answer: A

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.

234) Where should a business go to locate, test, purchase, and deploy software that works on AWS?

- A. AWS Marketplace
- B. Amazon Lumberyard
- C. AWS Artifact
- D. Amazon CloudSearch

Correct Answer: A

AWS Marketplace is a digital catalog with thousands of software listings from independent software vendors that make it easy to find, test, buy, and deploy software that runs on AWS.

235) A business's user base is worldwide in scope. The organization need a highly available application with reduced latency for end users.

Which AWS architecture approach will meet these criteria the MOST EFFECTIVELY?

- A. Single-Region, Multi-AZ architecture
- B. Multi-Region, active-active architecture
- C. Multi-Region, active-passive architecture
- D. Single-Region, Single-AZ architecture

Correct Answer: B

Simply put, a multi-region, active-active architecture **gets all the services on the client request path deployed across multiple AWS Regions**. In order to do so, several requirements have to be fulfilled. Data replication between regions must be fast and reliable.

236) Which duty is the customer's responsibility under the AWS shared responsibility model?

- A. Maintaining the infrastructure needed to run AWS Lambda
- B. Updating the operating system of Amazon DynamoDB instances
- C. Maintaining Amazon S3 infrastructure
- D. Updating the guest operating system on Amazon EC2 instances

Correct Answer: D

The customer assumes responsibility and management of the guest operating system (including updates and security patches), other associated application software as well as the configuration of the AWS provided security group firewall.

237) How can a user safeguard against AWS service outages in the event of a widespread natural disaster?

- A. Deploy applications across multiple Availability Zones within an AWS Region.
- B. Use a hybrid cloud computing deployment model within the geographic area.
- C. Deploy applications across multiple AWS Regions.
- D. Store application artifacts using AWS Artifact and replicate them across multiple AWS Regions.

Correct Answer: C

An AWS Region is a geographic location where AWS provides multiple, physically separated and isolated Availability Zones which are connected with low latency, high throughput, and highly redundant networking.

238) What is an example of a cloud-based application that is decoupled and scalable?

- A. A mail and log application that runs on a single Amazon EC2 instance
- B. A webpage that is hosted on Amazon S3 and uses AWS Lambda to update an Amazon DynamoDB database
- C. An Application Load Balancer, web server, and database server that support a monolithic application
- D. A legacy database server that is running on the maximum instance size supported by its license

Correct Answer: B

Many applications start to grow in complexity as they mature, making it harder for developers to maintain code or add new features. This can lead to monolithic applications, where developers must know more about the entire architecture to make changes. Typically, this causes code to become more fragile, and the rate of development slows down.

239) A client has many AWS accounts, each with its own billing.

How can the client benefit from bulk savings while minimizing the effect on AWS resources?

- A. Create one global AWS account and move all AWS resources to that account.
- B. Sign up for three years of Reserved Instance pricing up front.
- C. Use the consolidated billing feature from AWS Organizations.
- D. Sign up for the AWS Enterprise support plan to get volume discounts.

Correct Answer: C

Consolidated billing is a feature of AWS Organizations. You can use the management account of your organization to consolidate and pay for all member accounts. In consolidated billing, management accounts can also access the billing information, account information, and account activity of member accounts in their organization. This information may be used for services such as Cost Explorer, which can help management accounts improve their organization's cost performance.

240) A business must keep its data near to its core consumers.

Which AWS Cloud advantage satisfies this requirement?

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

Correct Answer: D

A successful global footprint depends on how you use Regions and their Availability Zones. The AWS Global Infrastructure is comprised of **69 Availability Zones within 22 geographic Regions.**

241) Who is responsible for the virtualization layer down to the physical security of the facilities in which AWS services operate under the AWS shared responsibility model?

- A. It is the sole responsibility of the customer.
- B. It is the sole responsibility of AWS.
- C. It is a shared responsibility between AWS and the customer.
- D. The customer's AWS Support plan tier determines who manages the configuration.

Correct Answer: B

AWS is responsible for protecting the infrastructure that runs all of the services offered in the AWS Cloud. This infrastructure is composed of the hardware, software, networking, and facilities that run AWS Cloud services.

242) A company's managed IAM policy does not allow users the rights essential to do needed activities.

How is this situation to be resolved?

- A. Enable AWS Shield Advanced
- B. Create a custom IAM policy
- C. Use a third-party web application firewall (WAF) managed rule from the AWS Marketplace
- D. Use AWS Key Management Service (AWS KMS) to create a customer-managed key

Correct Answer: B

When you create or edit IAM policies, AWS can automatically perform policy validation to help you create an effective policy with least privilege in mind. In the AWS Management Console, IAM identifies JSON syntax errors, while IAM Access Analyzer provides additional policy checks with recommendations to help you further refine your policies.

243) A business wishes to strengthen its security and audit posture by restricting incoming access to Amazon EC2.

What should the organization use instead of opening incoming SSH ports and handling SSH keys to remotely access instances?

- A. EC2 key pairs
- B. AWS Systems Manager Session Manager
- C. AWS Identity and Access Management (IAM)
- D. Network ACLs

Correct Answer: B

You can use the AWS Systems Manager console to start a session with a managed node in your account.

244) Which scenarios warrant the utilization of Amazon EC2 Spot Instances?

- A. A company wants to move its main website to AWS from an on-premises web server.
- B. A company has a number of application services whose Service Level Agreement (SLA) requires 99.999% uptime.
- C. A company's heavily used legacy database is currently running on-premises.
- D. A company has a number of infrequent, interruptible jobs that are currently using On-Demand Instances.

Correct Answer: D

A Spot Instance is an **unused Amazon EC2 instance that is available for less than the On-Demand price**. Because Spot Instances enable you to request unused EC2 instances at steep discounts, you can lower your Amazon EC2 costs significantly. The hourly price for a Spot Instance is called a Spot price.

245) A business must transmit time-sensitive communications to a large number of subscribers using a push technique.

Which Amazon Web Services (AWS) service should the business use?

- A. Amazon Kinesis
- B. Amazon MQ
- C. Amazon Simple Queue Service (Amazon SQS)
- D. Amazon Simple Notification Service (Amazon SNS)

Correct Answer: D

Amazon SNS allows applications to send time-critical messages to multiple subscribers through a “Push” mechanism

246) Which tasks need access to the root user of the AWS account? (Select two.)

- A. Changing an AWS Support plan
- B. Modifying an Amazon EC2 instance type
- C. Grouping resources in AWS Systems Manager
- D. Running applications in Amazon Elastic Kubernetes Service (Amazon EKS)
- E. Closing an AWS account

Tasks

Correct Answer: AE

- [Change your account settings](#). This includes the account name, email address, root user password, and root user access keys. Other account settings, such as contact information, payment currency preference, and Regions, do not require root user credentials.
- [Restore IAM user permissions](#). If the only IAM administrator accidentally revokes their own permissions, you can sign in as the root user to edit policies and restore those permissions.
- [Activate IAM access to the Billing and Cost Management console](#).
- View certain tax invoices. An IAM user with the [aws-portal:ViewBilling](#) permission can view and download VAT invoices from AWS Europe, but not AWS Inc or Amazon Internet Services Pvt. Ltd (AISPL).
- [Close your AWS account](#).
- [Change your AWS Support plan](#) or [Cancel your AWS Support plan](#). For more information, see [IAM for AWS Support](#).
- [Register as a seller in the Reserved Instance Marketplace](#).
- [Configure an Amazon S3 bucket to enable MFA \(multi-factor authentication\)](#) Delete.
- [Edit or delete an Amazon S3 bucket policy that includes an invalid VPC ID or VPC endpoint ID](#).
- [Sign up for GovCloud](#).

247) Which AWS Cloud best practice makes advantage of cloud computing's flexibility and agility?

- A. Provision capacity based on past usage and theoretical peaks
- B. Dynamically and predictively scale to meet usage demands
- C. Build the application and infrastructure in a data center that grants physical access
- D. Break apart the application into loosely coupled components

Correct Answer: B

In a traditional computing environment, you provision capacity based on an estimate of a theoretical maximum peak. This can result in periods where expensive resources are sitting idle or occasions of insufficient capacity. With cloud computing, you can access as much or as little capacity as you need and dynamically scale to meet actual demand, while only paying for what you use.

248) Users of Amazon Route 53 are able to:

- A. encrypt data in transit
- B. register DNS domain names
- C. generate and manage SSL certificates
- D. establish a dedicated network connection to AWS

Correct Answer: B

Amazon Route 53 is a highly available and scalable [Domain Name System \(DNS\)](#) web service. Route 53 connects user requests to internet applications running on AWS or on-premises.

249) Which characteristic of the Amazon Virtual Private Cloud (Amazon VPC) allows customers to link two VPCs?

- A. Amazon VPC endpoints
- B. Amazon Elastic Compute Cloud (Amazon EC2) ClassicLink
- C. Amazon VPC peering
- D. AWS Direct Connect

Correct Answer: C

A VPC peering connection is a networking connection between two VPCs that enables you to route traffic between them using private IPv4 addresses or IPv6 addresses. Instances in either VPC can communicate with each other as if they are within the same network. You can create a VPC peering connection between your own VPCs, or with a VPC in another AWS account. The VPCs can be in different regions (also known as an inter-region VPC peering connection).

250) Multiple Amazon EC2 instances are used to host an application. The program sends messages using Amazon Simple Notification Service (Amazon SNS).

Which AWS service or feature grants authorization for the application to access needed AWS services?

- A. AWS Certificate Manager (ACM)
- B. IAM roles
- C. AWS Security Hub
- D. Amazon GuardDuty

Correct Answer: B

An IAM role is an IAM entity that defines a set of permissions for making AWS service requests. IAM roles are not associated with a specific user or group.

Instead, trusted entities assume roles, such as IAM users, applications, or AWS services such as EC2.

251) A business is contemplating migrating to the AWS Cloud. The firm wishes to be able to scale its computing capacity in response to changing demand conditions.

Which AWS Cloud advantage does this case illustrate?

- A. Global deployments in minutes
- B. Cost savings
- C. Agility
- D. Elasticity

Correct Answer: D

In AWS, the process of getting the resources dynamically when you actually require them and then release the resources when you are done and do not need them is known as elasticity. In another way, growing or shrinking the resources dynamically when needed is known as Elasticity.

252) Which of the following is a NoSQL database service that is both quick and dependable?

- A. Amazon Redshift
- B. Amazon RDS
- C. Amazon DynamoDB
- D. Amazon S3

Correct Answer: C

Amazon DynamoDB is a fully managed NoSQL database service that provides fast and predictable performance with seamless scalability.

253) A client wants to develop and construct a new workload on AWS Cloud but lacks the necessary technical skills in AWS-related technologies. Which of the following AWS programs may a client use to accomplish that goal?

- A. AWS Partner Network Technology Partners
- B. AWS Marketplace
- C. AWS Partner Network Consulting Partners
- D. AWS Service Catalog

Correct Answer: C

benefits of becoming an APN Consulting Partner include:

- Access to ‘Go-to-market’ resources
- Training & Certification,
- Market Development Funding (MDF),
- Innovation Sandbox Credits
- Increased visibility to AWS customers and AWS field teams

254) Which AWS solution enables rapid setup and management of a new multi-account AWS environment?

- A. AWS Trusted Advisor
- B. AWS Security Hub
- C. AWS Control Tower
- D. AWS Resource Access Manager

Correct Answer: C

AWS Control Tower is a service for organizations with multiple accounts and teams who are looking for the easiest way to set up their new or existing multi-account AWS environment and govern at scale. With AWS Control Tower, cloud administrators get peace of mind knowing accounts in their organization are compliant with their established policies. Builders benefit from being able to provision new AWS accounts quickly.

It's easy to get started. From the AWS Control Tower console, select 'Set up landing zone' in the top right. You can read more in the [documentation on AWS Control Tower support for Organizations](#), watch [this video on how to get started with AWS Control Tower for AWS Organizations](#), or visit the [AWS Control Tower product webpage](#).

255) Which operation needs the usage of the root account user credentials for the AWS account?

- A. Closing an AWS account
- B. Creating a log file
- C. Modifying IAM user permissions
- D. Deleting IAM users

Correct Answer: A

To close your AWS account, do the following: **Sign in to the AWS Management Console as the root user of the account. From the navigation bar, choose your account name, and then choose Account.**

256) On Amazon EC2 instances, a business is operating and controlling its own Docker environment. Alternate is desired to assist in managing cluster size, scheduling, and environment management.

Which AWS service satisfies these criteria?

- A. AWS Lambda
- B. Amazon RDS
- C. AWS Fargate
- D. Amazon Athena

Correct Answer: C

With AWS Fargate, you no longer have to provision, configure, or scale clusters of virtual machines to run containers. This removes the need to choose server types, decide when to scale your clusters, or optimize cluster packing.

257) Which AWS situations exemplify the idea of elasticity? (Select two.)

- A. Scaling the number of Amazon EC2 instances based on traffic.
- B. Resizing Amazon RDS instances as business needs change.
- C. Automatically directing traffic to less-utilized Amazon EC2 instances.
- D. Using AWS compliance documents to accelerate the compliance process.
- E. Having the ability to create and govern environments using code.

Correct Answer: AB

Implement elasticity

- Identify the workloads that have variable load.
- Identify the workload load range. That is, is there enough variability to warrant adding or removing resources?
- Identify the application limitations (sessions, long initialization, licensing, etc.) that may limit elasticity.
- Identify if the increase in demand can be met by automatic scaling, or if it needs to be in place before (for events, launches, etc.).
- Identify applications that can use Amazon Athena or Amazon Aurora Serverless
- Implement elasticity using AWS Auto Scaling or Application Auto Scaling for the aspects of your service that are not elastic by design.
- Test elasticity both up and down, ensuring it will meet requirements for load variance.
- Iterate on implementation and testing until you can meet requirements. You may want to investigate golden Amazon Machine Images, docker containers, etc. to speed launch.

258) Which of the following are advantages of using the AWS Cloud to host infrastructure? (Select two.)

- A. There are no upfront commitments.
- B. AWS manages all security in the cloud.
- C. Users have the ability to provision resources on demand.
- D. Users have access to free and unlimited storage.
- E. Users have control over the physical infrastructure.

Correct Answer: AC

The No Upfront option does not require any upfront payment, and your commitment will be charged purely on a monthly basis.

Savings Plans offers significant savings over On Demand, just like EC2 RIs, but automatically reduce your bills on compute usage across any AWS region, even as usage changes.

259) Which of the following are benefits of Amazon Web Services' cloud computing platform? (Select two.)

- A. AWS manages the maintenance of the cloud infrastructure
- B. AWS manages the security of applications built on AWS
- C. AWS manages capacity planning for physical servers
- D. AWS manages the development of applications on AWS
- E. AWS manages cost planning for virtual servers

Correct Answer: AC

AWS manages all infrastructure layers.

Some of the infrastructure layers are:

- Data centers
- Hardware and software
- Virtualization
- Networking

260) Which AWS service enables infrastructure as code management?

- A. AWS CodePipeline
- B. AWS CodeDeploy
- C. AWS Direct Connect
- D. AWS CloudFormation

Correct Answer: D

AWS CloudFormation provides a common language for you to describe and provision all the infrastructure resources in your cloud environment. CloudFormation allows you to use a simple text file to model and provision, in an automated and secure manner, all the resources needed for your applications across all regions and accounts. This file serves as the single source of truth for your cloud environment.

261) How might AWS help a business manage costs when an application's consumption varies unpredictably?

- A. AWS will refund the cost difference if a customer moves to larger servers.
- B. The application can be built to scale up or down automatically as resources are needed
- C. Spot instances will automatically be used if the price is lower than on-demand instances.
- D. Amazon CloudWatch will automatically predict what resources are needed.

Correct Answer: B

AWS Auto Scaling can help us to optimize our utilization and cost performances when consuming the AWS services, so you only pay for the resources you need to run the application. When demand falls, AWS Auto Scaling will automatically eliminate any excess resource capacity, so you avoid any overspending.

262) What are the benefits of deploying an application across various Availability Zones using Amazon EC2 instances? (Select two.)

- A. Preventing a single point of failure
- B. Reducing the operational costs of the application
- C. Allowing the application to serve cross-region users with low latency
- D. Increasing the availability of the application
- E. Increasing the load of the application

Correct Answer: AD

The application will have higher availability because it can withstand a service disruption in one Availability Zone

263) Which AWS service supports a hybrid architecture that gives users the ability to extend AWS infrastructure, AWS services, APIs, and tools to data centers, co- location environments, or on-premises facilities?

- A. AWS Snowmobile
- B. AWS Local Zones
- C. AWS Outposts
- D. AWS Fargate

Correct Answer: C

AWS Outposts is a service that supports a hybrid architecture that gives users the ability to extend AWS infrastructure, AWS services, APIs, and tools to data centers, co-location environments, or on-premises facilities.

264) A company has a physical tape library to store data backups. The tape library is running out of space. The company needs to extend the tape library's capacity to the AWS Cloud. Which AWS service should the company use to meet this requirement?

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

Correct Answer: D

AWS Storage Gateway is a service that can be used to extend the tape library's capacity to the AWS Cloud.

AWS Storage Gateway is a hybrid storage service that allows users to connect their on-premises data centers to the AWS Cloud. It provides a range of storage options, including file-based, block-based, and tape-based storage, which can be used to store data backups and other types of data.

265) A business wishes to downsize its infrastructure in order to save money.

At what stages should a business downsize? (Select two.)

- A. Rightsizing before a migration occurs to the cloud.
- B. Rightsizing continuously after the cloud onboarding process.
- C. Rightsizing when AWS Support calls and explains that rightsizing is needed.
- D. Rightsizing when seasonal workloads are at their peak.
- E. Rightsizing after purchasing all Reserved Instances.

Correct Answer: AB

Right sizing is the process of matching instance types and sizes to your workload performance and capacity requirements at the lowest possible cost. It's also the process of looking at deployed instances and identifying opportunities to eliminate or downsize without compromising capacity or other requirements, which results in lower costs.

266) AWS Budgets may be used for the following purposes:

- A. prevent a given user from creating a resource
- B. send an alert when the utilization of Reserved Instances drops below a certain percentage
- C. set resource limits in AWS accounts to prevent overspending
- D. split an AWS bill across multiple forms of payment

Correct Answer: B

AWS Budgets allows you to set custom budgets to track your cost and usage from the simplest to the most complex use cases. With AWS Budgets, you can choose to be alerted by email or SNS notification when actual or forecasted cost and usage exceed your budget threshold, or when your actual RI and Savings Plans' utilization or coverage drops below your desired threshold.

267) An online retail company has seasonal sales spikes several times a year, primarily around holidays. Demand is lower at other times. The company finds it difficult to predict the increasing infrastructure demand for each season.

Which advantages of moving to the AWS Cloud would MOST benefit the company? (Choose two.)

- A. Global footprint
- B. Elasticity
- C. AWS service quotas
- D. AWS shared responsibility model
- E. Pay-as-you-go pricing

Correct Answer: BE

Cloud elasticity is **the ability to rapidly and dynamically allocate cloud resources**, including compute, storage, and memory resources, in response to changing demands. The goal of cloud elasticity is to avoid either overprovisioning or underprovisioning a particular service or application.

268) What are the advantages of unified billing for Amazon Web Services accounts?

- A. Access to AWS Personal Health Dashboard
- B. Combined usage volume discounts
- C. Improved account security
- D. Centralized AWS IAM

Consolidated Billing Benefits

Correct Answer: B

- **One Bill**

- A single bill with a combined view of AWS costs incurred by all accounts is generated

- **Easy Tracking**

- Detailed cost report & charges for each of the individual AWS accounts associated with the "paying account" can be easily tracked

- **Combined Usage & Volume Discounts**

- Charges might actually decrease because AWS combines usage from all the accounts to qualify you for **volume pricing discounts**

- **Free Tier**

- Customers that use Consolidated Billing to consolidate payment across multiple accounts **will only have access to one free usage tier** and it is not combined across accounts

269) A corporation want to connect to AWS from a distant office through a private, low-latency connection.

Which strategy is advised for meeting these requirements?

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

Correct Answer: D

The AWS Direct Connect cloud service is the shortest path to your AWS resources. While in transit, your network traffic remains on the AWS global network and never touches the public internet. This reduces the chance of hitting bottlenecks or unexpected increases in latency.

270) Which AWS service can be used to turn text into lifelike speech?

- A. Amazon Polly
- B. Amazon Kendra
- C. Amazon Rekognition
- D. Amazon Connect

Correct Answer: A

Amazon Polly is a service that can be used to turn text into lifelike speech. Amazon Polly uses advanced deep learning technologies to synthesize speech that sounds natural and lifelike, allowing users to convert written content into spoken language.

271) Which Amazon EC2 pricing model is dynamically adjusted in response to EC2 instance availability and demand?

- A. On-Demand Instances
- B. Reserved Instances
- C. Spot Instances
- D. Convertible Reserved Instances

Correct Answer: C

In the new model, the Spot prices are more predictable, updated less frequently, and are determined by supply and demand for Amazon EC2 spare capacity, not bid prices.

272) Which service should a client utilize to integrate and manage several Amazon Web Services accounts centrally?

- A. AWS IAM
- B. AWS Organizations
- C. AWS Schema Conversion Tool
- D. AWS Config

Correct Answer: B

Integrate multiple AWS services with **multiple unique AWS accounts**. Manage the user environments based on organizational, legal, or project-based policies. The accounts can also share resources, security mechanisms, audit requirements, configurations, and policies between multiple AWS organizations.

273) Which AWS service or tool can be used to capture information about inbound and outbound traffic in an Amazon VPC?

- A. VPC Flow Logs
- B. Amazon Inspector
- C. VPC endpoint services
- D. NAT gateway

Correct Answer: A

VPC Flow Logs is a feature that enables you to capture information about the IP traffic going to and from network interfaces in your VPC.

274) Which choices do users have when contacting AWS Support?

- A. Create an email case in the AWS Support Center.
- B. Visit a local AWS Support Center.
- C. Use live chat functionality.
- D. Call the customer service phone number.
- E. Use the video conference functionality of the AWS Support console.

Correct Answer: C

AWS Support offers a range of plans that provide access to tools and expertise that support the success and operational health of your AWS solutions. All support plans provide 24/7 access to customer service, AWS documentation, technical papers, and support forums. For technical support and more resources to plan, deploy, and improve your AWS environment, you can choose a support plan for your AWS use case.

275) A business must track and anticipate AWS expenditures and use. Additionally, the organization must configure event-driven alert alerts that are triggered when expenditure limitations are exceeded.

Which Amazon Web Services (AWS) offering or technology should the business employ to achieve these requirements?

- A. AWS Budgets
- B. Amazon CloudWatch
- C. AWS Config
- D. AWS Service Catalog

Correct Answer: A

Within **AWS Budgets**, a budget is a single, regularly updating cost or usage metric relating to your AWS resources. The rich structure of this AWS data allows you to set up multiple budgets to track this data across different departments or drilling down into different systems and resource types.

276) Which of the following IT functions does AWS do in order to relieve a business of its responsibility for managing its IT resources? (Select two.)

- A. Configuring operating system firewalls
- B. Setting up access controls for data
- C. Backing up databases
- D. Configuring database user accounts
- E. Installing operating systems

Correct Answer: CE

AWS maintains the configuration of its infrastructure devices, but a customer is responsible for configuring their own guest operating systems, databases, and applications.

277) Which AWS technologies aid in cost estimation? (Select three.)

- A. Detailed billing report
- B. Cost allocation tags
- C. AWS Simple Monthly Calculator
- D. AWS Total Cost of Ownership (TCO) Calculator
- E. Cost Estimator

Correct Answer: *BCD*

AWS cost allocation tags are **labels for classifying, organizing, and identifying your resources**. These tags, which are key-value pairs, make it easier to manage them and track their usage. By assigning tags to your resources, you can track your overall AWS costs, either through Cost Explorer or through the AWS API.

278) A company wants to ensure that two Amazon EC2 instances are in separate data centers with minimal communication latency between the data centers.

How can the company meet this requirement?

- A. Place the EC2 instances in two separate AWS Regions connected with a VPC peering connection.
- B. Place the EC2 instances in two separate Availability Zones within the same AWS Region.
- C. Place one EC2 instance on premises and the other in an AWS Region. Then connect them by using an AWS VPN connection.
- D. Place both EC2 instances in a placement group for dedicated bandwidth.

Correct Answer: *B*

easily **deploy EC2 instances in separate availability zones within the same region**, which is enough to meet the SLA (service-level agreement) for service credits from outages. If you haven't already, you can see which zone each instance is assigned to by viewing the details of each on the Instances page.

279) In comparison to conventional and virtualized data center prices, AWS offers the following:

- A. greater variable costs and greater upfront costs.
- B. fixed usage costs and lower upfront costs.
- C. lower variable costs and greater upfront costs.
- D. lower variable costs and lower upfront costs.

Correct Answer: D

AWS does not require minimum spend commitments or long-term contracts. You replace large upfront expenses with **low variable payments** that only apply to what you use. With AWS you are not bound to multi-year agreements or complicated licensing models.

280) Which situations should the AWS Abuse team be notified about?

- A. In Availability Zone has a service disruption
- B. An intrusion attempt is made from an AWS IP address
- C. A user has trouble accessing an Amazon S3 bucket from an AWS IP address
- D. A user needs to change payment methods due to a compromise

Correct Answer: *B*

The AWS Trust & Safety team can assist you when AWS resources are used to engage in the following types of abusive behavior:

- **Spam:** You are receiving unwanted emails from an AWS-owned IP address, or AWS resources are used to spam websites or forums.
- **Port scanning:** Your logs show that one or more AWS-owned IP addresses are sending packets to multiple ports on your server. You also believe this is an attempt to discover unsecured ports.
- **Denial-of-service (DoS) attacks:** Your logs show that one or more AWS-owned IP addresses are used to flood ports on your resources with packets. You also believe that this is an attempt to overwhelm or crash your server or the software running on your server.
- **Intrusion attempts:** Your logs show that one or more AWS-owned IP addresses are used to attempt to log in to your resources.

281) Which AWS feature should a client exploit to ensure an application's high availability?

- A. AWS Direct Connect
- B. Availability Zones
- C. Data centers
- D. Amazon Virtual Private Cloud (Amazon VPC)

Correct Answer: B

This is to achieve High Availability for any web application (in this case SwiftCode) deployed in AWS. The following features will be present:

- ☞ High availability across multiple instances/multiple availability zones.
- ☞ Auto Scaling of instances (scale up and scale down) based on number of requests coming in
- ☞ Additional Security to the instances/database that are in production
- ☞ No impact to end users during newer version of code deployment
- ☞ No Impact during patching the instances

282) In which situations should a company create an IAM user instead of an IAM role? (Choose two.)

- A. When an application that runs on Amazon EC2 instances requires access to other AWS services
- B. When the company creates AWS access credentials for individuals
- C. When the company creates an application that runs on a mobile phone that makes requests to AWS
- D. When the company needs to add users to IAM groups
- E. When users are authenticated in the corporate network and want to be able to use AWS without having to sign in a second time

Correct Answer: *BD*

An AWS Identity and Access Management (IAM) *user* is an entity that you create in AWS. The IAM user represents the human user or workload who uses the IAM user to interact with AWS. A user in AWS consists of a name and credentials.

An IAM user with administrator permissions is not the same thing as the AWS account root user.

283) How might an AWS client implement common access restrictions to a big group of users easily?

- A. Apply an IAM policy to an IAM group.
- B. Apply an IAM policy to an IAM role.
- C. Apply the same IAM policy to all IAM users with access to the same workload.
- D. Apply an IAM policy to an Amazon Cognito user pool.

Correct Answer: A

Instead of defining permissions for individual IAM users, it's usually more convenient to create groups that relate to job functions (administrators, developers, accounting, etc.). Next, define the relevant permissions for each group. Finally, assign IAM users to those groups. All the users in an IAM group inherit the permissions assigned to the group. That way, you can make changes for everyone in a group in just one place. As people move around in your company, you can simply change what IAM group their IAM user belongs to.

284) Which AWS service is used to provide encryption for Amazon EBS?

- A. AWS Certificate Manager
- B. AWS Systems Manager
- C. AWS KMS
- D. AWS Config

Correct Answer: C

AWS Key Management Service (KMS) makes it easy for you to create and manage cryptographic keys and control their use across a wide range of AWS services and in your applications. AWS KMS is a secure and resilient service that uses hardware security modules that have been validated under FIPS 140-2, or are in the process of being validated, to protect your keys. AWS KMS is integrated with AWS CloudTrail to provide you with logs of all key usage to help meet your regulatory and compliance needs.

285) A business need software solutions that are either hosted on the AWS platform or are linked with it. Independent software providers, as well as management and security vendors, are required to provide solutions.

Which organization or team is capable of providing these solutions?

- A. AWS technical account managers (TAMs)
- B. AWS Partner Network (APN) Consulting Partners
- C. AWS Concierge Support
- D. AWS Partner Network (APN) Technology Partners

Correct Answer: D

AWS Partner Network (APN) is a global partner program that vendors and other service providers offer cloud software services and build solutions for **Amazon Web Services customers**. The partners are professionals in software and services who have earned an endorsement from AWS

286) Which AWS services are available for application deployment?
(Select two.)

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

Correct Answer: AC

AWS Elastic Beanstalk deploys web applications so that you can focus on your business.

AWS OpsWorks provides a simple and flexible way to create and manage stacks and applications. With AWS OpsWorks, you can provision AWS resources, manage their configuration, deploy applications to those resources, and monitor their health.

287) Which AWS services make use of global edge locations? (Choose two.)

- A. AWS Fargate
- B. Amazon CloudFront
- C. AWS Global Accelerator
- D. AWS Wavelength
- E. Amazon VPC

Correct Answer: BC

- CloudFront is the most commonly discussed use of edge locations. It's a content delivery network that caches content in edge locations. Content can be served directly from the cache, so it gets to users faster. CloudFront is often used to serve static assets, speed up websites, and stream video.
- Route 53 is purportedly a managed DNS service with [name servers spread across Amazon's edge locations](#). DNS responses come directly from the edge locations, so they're as fast as possible.
- Web Application Firewall and AWS Shield provide a firewall and DDoS protection, respectively. These services filter traffic in edge locations so malicious or unwanted traffic can be discarded as close to source as possible. This, in turn, reduces congestion on Amazon's global network and the public internet.
- AWS Global Accelerator allows you to route requests for key resources through Amazon's global network—even if the request is going halfway round the world. The request is initially routed to the closest edge location and then travels through Amazon's network—often with lower latency and higher throughput than the public internet.

288) Which responsibility do customers bear while using Amazon EC2?
(Select two.)

- A. Underlying hardware maintenance
- B. File-system-level encryption
- C. Guest operating system firewall configuration
- D. Hypervisor-level software patching
- E. Physical security at data center facilities

Correct Answer: BC

Customers that deploy an Amazon EC2 instance are responsible for **management of the guest operating system** (including updates and security patches), any application software or utilities installed by the customer on the instances, and the configuration of the AWS-provided firewall (called a security group) on each instance.

289) A company is operating several factories where it builds products. The company needs the ability to process data, store data, and run applications with local system interdependencies that require low latency. Which AWS service should the company use to meet these requirements?

- A. AWS IoT Greengrass
- B. AWS Lambda
- C. AWS Outposts
- D. AWS Snowball Edge

Correct Answer: C

Outposts is designed to provide the same APIs, control plane, and hardware as the AWS cloud, but with the ability to run workloads on-premises. This can be useful for applications that require low latency or local system interdependencies, as it allows you to keep your data and applications close to your users and processes.

290) A business needs handle a huge volume of data from social network accounts using high-throughput graphical queries.

Which AWS service will assist the business in developing a cloud architecture that satisfies these criteria?

- A. Amazon RDS
- B. Amazon DynamoDB
- C. Amazon Neptune
- D. Amazon Redshift

Correct Answer: C

Amazon Neptune is a fast, reliable, fully managed graph database service that makes it easy to build and run applications.

291) Which AWS service enables the use of the AWS Cloud to host a NoSQL database?

- A. Amazon Aurora
- B. Amazon DynamoDB
- C. Amazon RDS
- D. Amazon Redshift

Correct Answer: *B*

Amazon DynamoDB is a fully managed NoSQL database service that provides fast and predictable performance with seamless scalability.

292) Which of the following acts as an instance-level firewall to control inbound and outbound access?

- A. Network access control list
- B. Security groups
- C. AWS Trusted Advisor
- D. Virtual private gateways

Correct Answer: B

A **security group** acts as a virtual firewall for your instance to control inbound and outbound traffic. When you launch an instance in a VPC, you can assign the instance to up to five security groups. Security groups act at the instance level, not the subnet level.

293) A business is consolidating many apps into a single Amazon Web Services (AWS) account. The organization wishes to keep track of the AWS Cloud fees paid by individual applications.

What can the business do to ensure compliance with this requirement?

- A. Set up invoiced billing.
- B. Use AWS Artifact.
- C. Set the budgets in Cost Explorer.
- D. Create cost allocation tags.

Correct Answer: D

Using Cost Allocation Tags

[PDF](#) | [Kindle](#) | [RSS](#)

A tag is a label that you or AWS assigns to an AWS resource. Each tag consists of a *key* and a *value*. For each resource, each tag key must be unique, and each tag key can have only one value. You can use tags to organize your resources, and cost allocation tags to track your AWS costs on a detailed level. After you activate cost allocation tags, AWS uses the cost allocation tags to organize your resource costs on your cost allocation report, to make it easier for you to categorize and track your AWS costs. AWS provides two types of cost allocation tags, an *AWS generated tags* and *user-defined tags*. AWS, or AWS Marketplace ISV defines, creates, and applies the AWS generated tags for you, and you define, create, and apply user-defined tags. You must activate both types of tags separately before they can appear in Cost Explorer or on a cost allocation report.

294) On an Amazon EC2 instance, a batch job takes 5 hours to complete. Monthly, the quantity of data to be processed doubles, and the time required to process it is proportionate.

- What is the optimal cloud architecture for meeting this escalating demand?
- A. Run the application on a bigger EC2 instance size.
 - B. Switch to an EC2 instance family that better matches batch requirements.
 - C. Distribute the application across multiple EC2 instances and run the workload in parallel.
 - D. Run the application on a bare metal EC2 instance.

Correct Answer: C

295) A company has a workload that will run continuously for 1 year. The workload cannot tolerate service interruptions.

Which Amazon EC2 purchasing option will be MOST cost-effective?

- A. All Upfront Reserved Instances
- B. Partial Upfront Reserved Instances
- C. Dedicated Instances
- D. On-Demand Instances

Correct Answer: A

With the All Upfront option, you pay for the entire Reserved Instance term with one upfront payment. This option provides you with the largest discount compared to On-Demand Instance pricing.

- 296) How can AWS Trusted Advisor assist AWS Cloud users? (Select two.)
- A. It identifies software vulnerabilities in applications running on AWS
 - B. It provides a list of cost optimization recommendations based on current AWS usage
 - C. It detects potential security vulnerabilities caused by permissions settings on account resources
 - D. It automatically corrects potential security issues caused by permissions settings on account resources
 - E. It provides proactive alerting whenever an Amazon EC2 instance has been compromised

Correct Answer: BC

AWS Trusted Advisor provides recommendations that help you follow AWS best practices. Trusted Advisor evaluates your account by using checks. These checks identify ways to optimize your AWS infrastructure, improve security and performance, reduce costs, and monitor service quotas. You can then follow the recommendations to optimize your services and resources.

297) Which AWS function will assist users in determining the CPU capacity of an application running on an Amazon EC2 instance?

- A. Amazon CloudWatch
- B. AWS Config
- C. AWS CloudTrail
- D. Amazon Inspector

Correct Answer: A

You can see the CPU Credit balance for each T2 instance in EC2 per-Instance metrics in Amazon CloudWatch. T2 instances have four metrics, CPUCreditUsage, CPUCreditBalance, CPUSurplusCreditBalance and CPUSurplusCreditsCharged.

298) A user may create a master payer account in order to access aggregated billing data via:

- A. AWS Budgets.
- B. Amazon Macie.
- C. Amazon QuickSight.
- D. AWS Organizations.

Correct Answer: D

As part of AWS account creation, AWS Organizations creates an IAM role with full administrative permissions in the new account. IAM users and IAM roles with appropriate permissions in the master account can assume this IAM role to gain access to the newly created account.

299) Every few years, a business invests several months in modernizing its on-premises infrastructure. The organization wishes to shorten the time required for infrastructure purchase by shifting to the AWS Cloud.

What is the primary advantage of transferring this use case to the AWS Cloud?

- A. AWS will help move the existing hardware to the AWS data centers.
- B. The company will have increased agility with on-demand access to IT resources.
- C. Enterprise support will be available to help with recurring application installation and setup.
- D. The company will experience less downtime with Multi-AZ deployments.

Correct Answer: *B*

300) Which AWS service helps protect against DDoS attacks?

- A. AWS Shield
- B. Amazon Inspector
- C. Amazon GuardDuty
- D. Amazon Detective

Correct Answer: A

AWS Shield is a managed **Distributed Denial of Service** (DDoS) protection service that safeguards applications running on AWS. AWS Shield provides always-on detection and automatic inline mitigations that minimize application downtime and latency, so there is no need to engage AWS Support to benefit from DDoS protection.

301) Which Amazon Web Services (AWS) offering allows customers to aggregate billing for many accounts?

- A. Amazon QuickSight
- B. AWS Organizations
- C. AWS Budgets
- D. Amazon Forecast

Correct Answer: B

You can use the consolidated billing feature in AWS Organizations to consolidate billing and payment for multiple AWS accounts or multiple Amazon Internet Services Pvt. Ltd (AISPL) accounts. Every organization in AWS Organizations has a master (payer) account that pays the charges of all the member (linked) accounts.

302) Which of the following are advantages of Amazon Web Services' cloud computing platform? (Select two.)

- A. Unlimited uptime
- B. Elasticity
- C. Agility
- D. Colocation
- E. Capital expenses

Correct Answer: BC

The most celebrated benefit of AWS cloud is elasticity since you can expand the services when you experience more traffic.

Agile developments in AWS Cloud through strategies are day by day becoming more established within the enterprises across the world. With so much improvement and call for optimization in the cloud, it is necessary that these strategies get established from the ground up within the organizations. It is highly important as already enterprises have a lot of bequest, politics and hierarchies which act as barriers in their businesses.

303) An application installed in the AWS Cloud exhibits irregular consumption patterns and is responsible for non-stop workloads.

Which Amazon EC2 pricing plan is the MOST cost-effective for this application?

- A. Dedicated Instances
- B. Spot Instances
- C. Reserved Instances
- D. On-Demand Instances

Correct Answer: D

On-demand instances are **virtual servers that run in Amazon EC2** and are available on demand, with organizations paying for them by the hour or second with no long-term commitments. An instance refers to a virtual server in the AWS Cloud, specifically in the Amazon EC2 compute platform.

304) Which service's primary aim is to manage software versions?

- A. Amazon CodeStar
- B. AWS Command Line Interface (AWS CLI)
- C. Amazon Cognito
- D. AWS CodeCommit

Correct Answer: D

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.

305) A business is now undergoing a security examination. The audit includes a security and compliance review of the company's AWS infrastructure and services. The auditor must identify and download AWS security and compliance materials. The System and Organization Control (SOC) reports are one of these documents.

Which AWS service or collection of services is capable of providing these documents?

- A. AWS Abuse team
- B. AWS Artifact
- C. AWS Support
- D. AWS Config

Correct Answer: *B*

AWS Artifact is a portal that provides an enterprise with access to security and compliance reports that apply to the Amazon Web Services (AWS) public cloud.

306) Using AWS Config to record, audit, and evaluate changes to AWS resources to enable traceability is an example of which AWS Well-Architected Framework pillar?

- A. Security
- B. Operational excellence
- C. Performance efficiency
- D. Cost optimization

Correct Answer: A

307) Which of the following is a design concept for AWS Cloud architecture?

- A. Implement single points of failure.
- B. Implement loose coupling.
- C. Implement monolithic design.
- D. Implement vertical scaling.

Correct Answer: B

Loose coupling between services can also be done through asynchronous integration. It involves one component that generates events and another that consumes them. The two components do not integrate through direct point-to-point interaction, but usually through an intermediate durable storage layer. This approach decouples the two components and introduces additional resiliency. So, for example, if a process that is reading messages from the queue fails, messages can still be added to the queue to be processed when the system recovers.

308) The continuous lowering in AWS Cloud price is a result of the following:

- A. pay-as-you go pricing
- B. the AWS global infrastructure
- C. economies of scale
- D. reserved storage pricing

Correct Answer: C

•More customers lead to higher **AWS** usage which leads to more infrastructure. The **economies of scale** effect occurs because costs can now be spread over a larger number of customers. The infrastructure becomes cheaper, prices can be reduced and new customers benefit from the lower prices.

309) Which phase discusses agility as an advantage of AWS Cloud-based development?

- A. The ability to pay only when computing resources are consumed, based on the volume of resources that are consumed
- B. The ability to eliminate guessing about infrastructure capacity needs
- C. The ability to support innovation through a reduction in the time that is required to make IT resources available to developers
- D. The ability to deploy an application in multiple AWS Regions around the world in minutes

Correct Answer: C

310) Which AWS tool or feature acts as a VPC firewall at the subnet level?

- A. Security group
- B. Network ACL
- C. Traffic Mirroring
- D. Internet gateway

Correct Answer: B

"A network access control list (ACL) allows or denies specific inbound or outbound traffic at the SUBNET LEVEL"

311) A business wishes to deliver managed Windows virtual desktops and programs through secure network connections to its distant workers.

Which AWS services does the business have access to in order to achieve these requirements? (Select two.)

- A. Amazon Connect
- B. Amazon AppStream 2.0
- C. Amazon WorkSpaces
- D. AWS Site-to-Site VPN
- E. Amazon Elastic Container Service (Amazon ECS)

Correct Answer: BC

With AppStream 2.0, you can easily add your existing desktop applications to AWS and enable your users to instantly stream them. Windows users can use either the AppStream 2.0 client or an HTML5-capable web browser for application streaming.

Amazon WorkSpaces enables you to provision virtual, cloud-based Microsoft Windows, Amazon Linux, or Ubuntu Linux desktops for your users, known as *WorkSpaces*.

312) Which of the following is an AWS shared responsibility?

- A. Identity and access management (IAM)
- B. Server-side encryption (SSE)
- C. Firewall configuration
- D. Maintaining physical hardware

Correct Answer: D

AWS is responsible for protecting the infrastructure that runs all of the services offered in the AWS Cloud. This infrastructure is composed of the hardware, software, networking, and facilities that run AWS Cloud services.

313) Which storage service can be utilized to host static webpages at a minimal cost?

- A. Amazon Glacier
- B. Amazon DynamoDB
- C. Amazon Elastic File System (Amazon EFS)
- D. Amazon Simple Storage Service (Amazon S3)

Correct Answer: D

You can use **Amazon S3** to host a static website. On a static website, individual webpages include static content. They might also contain client-side scripts. By contrast, a dynamic website relies on server-side processing, including server-side scripts, such as PHP, JSP, or ASP.NET. Amazon S3 does not support server-side scripting, but AWS has other resources for hosting dynamic websites.

314) Which AWS service can be used to decouple applications?

- A. AWS Config
- B. Amazon Simple Queue Service (Amazon SQS)
- C. AWS Batch
- D. Amazon Simple Email Service (Amazon SES)

Correct Answer: B

Amazon Simple Queue Service (Amazon SQS) is a fully managed message queuing service that makes it easy to decouple and scale microservices, distributed systems, and serverless applications. Amazon SQS moves data between distributed application components and helps you decouple these components.

315) Which AWS services are globally specified rather than regionally defined? (Select two.)

- A. Amazon Route 53
- B. Amazon EC2
- C. Amazon S3
- D. Amazon CloudFront
- E. Amazon DynamoDB

Correct Answer: AD

AWS Global, Regional, AZ resource Availability

AWS provides a lot of services and these services are either Global, Regional or specific to the Availability Zone and cannot be accessed outside. Most of the AWS managed services are regional based services (except for IAM, Route53, CloudFront, WAF etc).

316) Currently, a company's online program is highly dependent on underlying components, which means that when one component fails, the whole web site crashes.

Which AWS Cloud design concept is most appropriate for resolving the present design issue?

- A. Implementing elasticity, enabling the application to scale up or scale down as demand changes.
- B. Enabling several EC2 instances to run in parallel to achieve better performance.
- C. Focusing on decoupling components by isolating them and ensuring individual components can function when other components fail.
- D. Doubling EC2 computing resources to increase system fault tolerance.

Correct Answer: C

317) A user must locate, categorize, and safeguard sensitive data stored in Amazon S3 automatically.

Which AWS service satisfies these criteria?

- A. Amazon Inspector
- B. Amazon Macie
- C. Amazon GuardDuty
- D. AWS Secrets Manager

Correct Answer: B

To help you manage the security posture of your organization's Amazon Simple Storage Service (Amazon S3) data estate, Macie provides you with an inventory of your S3 buckets, and automatically evaluates and monitors the buckets for security and access control. If Macie detects a potential issue with the security or privacy of your data, such as a bucket that becomes publicly accessible, Macie generates a finding for you to review and remediate as necessary.

318) On an Amazon EC2 instance, a business hosts an application. Several AWS resources, including Amazon S3 and Amazon DynamoDB, are required by the EC2 instance.

What is the MOST OPTIMAL way to delegate permissions?

- A. Create an IAM role with the required permissions. Attach the role to the EC2 instance.
- B. Create an IAM user and use its access key and secret access key in the application.
- C. Create an IAM user and use its access key and secret access key to create a CLI profile in the EC2 instance
- D. Create an IAM role with the required permissions. Attach the role to the administrative IAM user.

Correct Answer: A

319) Which of the following are support categories for AWS Trusted Advisor?
(Select two.)

- A. Operational excellence
- B. Cost optimization
- C. Security
- D. Well-Architected Framework
- E. Rightsizing

Correct Answer: BC

AWS Trusted Advisor -
Reduce costs, improve performance, improve security

320) Which disaster recovery option is the LEAST expensive?

- A. Warm standby
- B. Multisite
- C. Backup and restore
- D. Pilot light

Correct Answer: C

Sending backups to AWS can be the first step in reducing total cost of ownership and your data center footprint.

321) Which type of AWS storage is ephemeral and is deleted when an Amazon EC2 instance is stopped or terminated?

- A. Amazon Elastic Block Store (Amazon EBS)
- B. Amazon EC2 instance store
- C. Amazon Elastic File System (Amazon EFS)
- D. Amazon S3

Correct Answer: B

When you stop or terminate an instance, every block of storage in the instance store is reset. Therefore, your data cannot be accessed through the instance store of another instance.

322) A company needs fully managed, highly reliable, and scalable file storage that is accessible over the Server Message Block (SMB) protocol.

Which AWS service will meet these requirements?

- A. Amazon S3
- B. Amazon Elastic File System (Amazon EFS)
- C. Amazon FSx for Windows File Server
- D. Amazon Elastic Block Store (Amazon EBS)

Correct Answer: C

Amazon FSx for Windows File Server is a fully managed, highly reliable, and scalable file storage service that is accessible over the Server Message Block (SMB) protocol. It provides fully managed, highly reliable, and scalable file storage that is accessible over the SMB protocol. It is designed to work with the Microsoft Windows operating system and it supports the SMB protocol which allows to access the file storage from Windows servers and clients.

323) Which of the following is a component of the AWS Global Infrastructure?

- A. Amazon Alexa
- B. AWS Regions
- C. Amazon Lightsail
- D. AWS Organizations

Correct Answer: *B*

The AWS Cloud spans 99 Availability Zones within 31 geographic regions around the world, with announced plans for 12 more Availability Zones and 4 more AWS Regions in Canada, Israel, New Zealand, and Thailand.

324) What is the purpose of having an internet gateway within a VPC?

- A. To create a VPN connection to the VPC
- B. To allow communication between the VPC and the internet
- C. To impose bandwidth constraints on internet traffic
- D. To load balance traffic from the internet across Amazon EC2 instances

Correct Answer: B

An internet gateway is a horizontally scaled, redundant, and highly available VPC component that allows communication between your VPC and the internet.

325) Which AWS service allows users to download security and compliance reports about the AWS infrastructure on demand?

- A. Amazon GuardDuty
- B. AWS Security Hub
- C. AWS Artifact
- D. AWS Shield

Correct Answer: C

AWS Artifact is your go-to, central resource for compliance-related information that matters to you. It provides on-demand access to security and compliance reports from AWS and ISVs who sell their products on AWS Marketplace.

326) A company is planning an infrastructure deployment to the AWS Cloud. Before the deployment, the company wants a cost estimate for running the infrastructure.
Which AWS service or feature can provide this information?

- A. Cost Explorer
- B. AWS Trusted Advisor
- C. AWS Cost and Usage Report
- D. AWS Pricing Calculator

Correct Answer: D

AWS Pricing Calculator

Estimate the cost for your architecture solution.

Configure a cost estimate that fits your unique business or personal needs with AWS products and services.

327) How can Amazon EC2 Auto Scaling groups contribute to a web application's high availability?

- A. They automatically add more instances across multiple AWS Regions based on global demand of the application.
- B. They automatically add or replace instances across multiple Availability Zones when the application needs it.
- C. They enable the application's static content to reside closer to end users.
- D. They are able to distribute incoming requests across a tier of web server instances.

Correct Answer: B

When the unhealthy Availability Zone returns to a healthy state, Auto Scaling automatically redistributes the application instances evenly across all of the designated Availability Zones.

328) A business has a stateless application workload that can withstand brief periods of outage. The program conducts calculations in massively parallel fashion.

Which Amazon EC2 pricing model should the business choose to save costs?

- A. On-Demand Instances
- B. Spot Instances
- C. Reserved Instances
- D. Dedicated Instances

Correct Answer: B

A Spot Instance is an instance that uses **spare EC2 capacity that is available for less than the On-Demand price**. Because Spot Instances enable you to request unused EC2 instances at steep discounts, you can lower your Amazon EC2 costs significantly. The hourly price for a Spot Instance is called a Spot price.

329) Which of the following is a method for enhancing AWS security? (Select two.)

- A. Using AWS Artifact
- B. Granting the broadest permissions to all IAM roles
- C. Running application code with AWS Cloud9
- D. Enabling multi-factor authentication (MFA) with Amazon Cognito
- E. Using AWS Trusted Advisor security checks

Correct Answer: DE

MFA adds extra security because it requires users to provide unique authentication from an AWS supported MFA mechanism in addition to their regular sign-in credentials when they access AWS websites or services: **Virtual MFA devices**. A software app that runs on a phone or other device and emulates a physical device.

330) Which AWS service or tool helps to centrally manage billing and allow controlled access to resources across AWS accounts?

- A. AWS Identity and Access Management (IAM)
- B. AWS Organizations
- C. Cost Explorer
- D. AWS Budgets

Correct Answer: B

By default, organizations support **consolidated billing** features. Consolidated billing separates paying accounts and linked accounts. You can use AWS Organizations to set up a single payment method for all the AWS accounts in your organization through consolidated billing.

331) Under the AWS shared responsibility paradigm, the following parties are responsible for the security and patching of the guest operating system:

- A. AWS Support
- B. the customer
- C. AWS Systems Manager
- D. AWS Config

Correct Answer: B

For example, a service such as Amazon Elastic Compute Cloud (Amazon EC2) is categorized as Infrastructure as a Service (IaaS) and, as such, requires the customer to perform all of the necessary security configuration and management tasks. Customers that deploy an Amazon EC2 instance are responsible for management of the guest operating system (including updates and security patches), any application software or utilities installed by the customer on the instances, and the configuration of the AWS-provided firewall (called a security group) on each instance.

332) What is an example of AWS Cloud's high availability?

- A. Consulting AWS technical support at any time day or night
- B. Ensuring an application remains accessible, even if a resource fails
- C. Making any AWS service available for use by paying on demand
- D. Deploying in any part of the world using AWS Regions

Correct Answer: B

333) Which of the following are Amazon Virtual Private Cloud (Amazon VPC) resources?

- A. Objects; access control lists (ACLs)
- B. Subnets; internet gateways
- C. Access policies; buckets
- D. Groups; roles

Correct Answer: B

A subnet is a range of IP addresses in your VPC. A subnet must reside in a single Availability Zone. After you add subnets, you can deploy AWS resources in your VPC.

A gateway connects your VPC to another network. For example, use an internet gateway to connect your VPC to the internet. Use a VPC endpoint to connect to AWS services privately, without the use of an internet gateway or NAT device.

334) Which aspects of AWS make it cost viable for workloads with fluctuating customer demand? (Select two.)

- A. High availability
- B. Shared security model
- C. Elasticity
- D. Pay-as-you-go pricing
- E. Reliability

Correct Answer: CD

335) A business wants to migrate 40TB of data from on-premises storage systems to Amazon S3. The transfer must occur as rapidly as feasible while maintaining a low cost. The firm has internet access at a speed of 100 megabits per second.

Which AWS service will satisfy these criteria?

- A. AWS Snowball
- B. AWS Direct Connect
- C. AWS Storage Gateway
- D. Amazon S3 Transfer Acceleration

Correct Answer: A

Snowball is better for 40TB transfer. It will make transfer while keeping the costs at minimum. With 100 mbps, it will be quick.

336) Which of the following allows customers to programmatically access the power of AWS services?

- A. AWS Command Line Interface (AWS CLI)
- B. AWS Trusted Advisor
- C. AWS CodeDeploy
- D. AWS Management Console

Correct Answer: A

The AWS Command Line Interface (AWS CLI) is a unified tool to manage your AWS services. With just one tool to download and configure, you can control multiple AWS services from the command line and automate them through scripts.

337) A business wishes to migrate some of its resources to the AWS Cloud. To comply with regulatory standards, data must stay on-premises and local. AWS and the company's resources must have a low latency.

Which Amazon Web Services (AWS) service or functionality may be leveraged to fulfill these requirements?

- A. AWS Local Zones
- B. Availability Zones
- C. AWS Outposts
- D. AWS Wavelength Zones

Correct Answer: C

With AWS Outposts, you can run some AWS services locally and connect to a broad range of services available in the local AWS Region. Run applications and workloads on premises using familiar AWS services, tools, and APIs. Outposts supports workloads and devices requiring low latency access to on-premises systems, local data processing, data residency, and application migration with local system interdependencies.

338) A business has specified the Amazon Web Services (AWS) resources it requires for a new application. The business must determine the expenses associated with operating the application on AWS.

What actions should the business take to comply with this stipulation?

- A. Take advantage of AWS on-demand pricing.
- B. Use the AWS Pricing Calculator to generate an approximate dollar amount.
- C. Use Amazon QuickSight to analyze current on-premises spending.
- D. Use Amazon AppStream 2.0 for real-time pricing analytics.

Correct Answer: *B*

Estimate your AWS billing

- If you plan to migrate significant infrastructure to AWS, use the [AWS Sales & Business Development contact form](#), and then choose **I need to speak to someone in sales**.
- To estimate a bill, use the [AWS Pricing Calculator](#). Choose **Create estimate**, and then choose your planned resources by service. The AWS Pricing Calculator provides an estimated cost per month. For more information, see [What is AWS Pricing Calculator?](#)
- To forecast your costs, use the [AWS Cost Explorer](#). Use [cost allocation tags](#) to divide your resources into groups, and then estimate the costs for each group.

339) For its steady-state database, a corporation runs a self-managed Oracle database directly on Amazon EC2. The corporation wishes to cut its computing expenses.

Which option should the business choose in order to optimize savings over a three-year period?

- A. EC2 Dedicated Instances
- B. EC2 Spot Instances
- C. EC2 Reserved Instances
- D. EC2 On-Demand Instances

Correct Answer: C

Amazon EC2 Reserved Instances (RI) provide a significant discount (up to 72%) compared to On-Demand pricing and provide a capacity reservation when used in a specific Availability Zone.

340) A corporation is developing an application that must distribute photos and videos internationally with the least amount of delay possible.

Which strategy may the business take to do this in the most cost-effective manner?

- A. Deliver the content through Amazon CloudFront.
- B. Store the content on Amazon S3 and enable S3 cross-region replication.
- C. Implement a VPN across multiple AWS Regions.
- D. Deliver the content through AWS PrivateLink.

Correct Answer: A

Amazon CloudFront is a content delivery network (CDN) operated by **Amazon Web Services**. Content delivery networks provide a globally-distributed network of proxy servers that cache content, such as web videos or other bulky media, more locally to consumers, thus improving access speed for downloading the content

341) Which AWS service or functionality gives advice to customers about frequently asked billing questions?

- A. AWS Marketplace
- B. AWS Knowledge Center
- C. Amazon Pinpoint
- D. Amazon Connect

Correct Answer: B

All **AWS** account owners have access to account and **billing** support free of charge.

342) Which AWS services enable an on-premises infrastructure to be extended to the AWS Cloud? (Select two.)

- A. Amazon EBS
- B. AWS Direct Connect
- C. Amazon CloudFront
- D. AWS Storage Gateway
- E. Amazon Connect

Correct Answer: *BD*

AWS Direct Connect is a **cloud service solution** that makes it easy to establish a dedicated network connection from your premises to AWS.

AWS Storage Gateway is a set of hybrid cloud storage services that provide on-premises access to virtually unlimited cloud storage.

343) Which AWS service enables the generation of warnings based on a monthly bill estimate?

- A. AWS Config
- B. Amazon CloudWatch
- C. AWS X-Ray
- D. AWS CloudTrail

Correct Answer: B

You can monitor your estimated AWS charges by using Amazon CloudWatch. When you enable the monitoring of estimated charges for your AWS account, the estimated charges are calculated and sent several times daily to CloudWatch as metric data.

Billing metric data is stored in the US East (N. Virginia) Region and represents worldwide charges. This data includes the estimated charges for every service in AWS that you use, in addition to the estimated overall total of your AWS charges.

344) A company needs to identify the last time that a specific user accessed the AWS Management Console. Which AWS service will provide this information?

- A. Amazon Cognito
- B. AWS CloudTrail
- C. Amazon Inspector
- D. Amazon GuardDuty

Correct Answer: B

AWS CloudTrail enables auditing, security monitoring, and operational troubleshooting by tracking user activity and API usage. CloudTrail logs, continuously monitors, and retains account activity related to actions across your AWS infrastructure, giving you control over storage, analysis, and remediation actions.

345) Which AWS service may be utilized to deploy the application?

- A. AWS AppSync
- B. AWS Batch
- C. AWS CodePipeline
- D. AWS DataSync

Correct Answer: C

AWS CodePipeline is a continuous delivery service you can use to model, visualize, and automate the steps required to release your software. You can quickly model and configure the different stages of a software release process. CodePipeline automates the steps required to release your software changes continuously.

346) Which AWS service or functionality is by default highly available?

- A. Amazon EC2
- B. Amazon Aurora
- C. NAT instances
- D. Amazon RDS

Correct Answer: D

Amazon Relational Database Service (Amazon RDS) supports two easy-to-use options for ensuring High Availability of your relational database. For your MySQL, MariaDB, PostgreSQL, Oracle, and SQL Server database (DB) instances, you can use **Amazon RDS Multi-AZ** deployments. When you provision a Multi-AZ DB instance, Amazon RDS automatically creates a primary DB instance and synchronously replicates the data to a standby instance in a different Availability Zone (AZ).

347) A business requires data migration from its on-premises environment to the AWS Cloud. The business demands extremely elastic and efficient connection.

Which AWS service satisfies these criteria?

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

Correct Answer: *B*

AWS Storage Gateway is a hybrid cloud storage service that gives you on-premises access to virtually unlimited cloud storage. You can use Storage Gateway to simplify storage management and reduce costs for key hybrid cloud storage use cases. These include moving backups to the cloud, using on-premises file shares backed by cloud storage, and providing low-latency access to data in AWS for on-premises applications.

348) A company wants to perform sentiment analysis on customer service email messages that it receives. The company wants to identify whether the customer service engagement was positive or negative. Which AWS service should the company use to perform this analysis?

- A. Amazon Textract
- B. Amazon Translate
- C. Amazon Comprehend
- D. Amazon Rekognition

Correct Answer: C

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

349) What is the total amount of storage offered by Amazon S3?

- A. 100MB
- B. 5 GB
- C. 5 TB
- D. Unlimited

Correct Answer: D

The total volume of data and number of objects you can store are unlimited. Individual Amazon S3 objects can range in size from a minimum of 0 bytes to a maximum of 5 TB.

350) Which AWS service or functionality is exclusively accessible to AWS Enterprise Support customers?

- A. AWS Trusted Advisor
- B. AWS Support case
- C. AWS Concierge Support team
- D. Amazon Connect

Correct Answer: C

AWS Enterprise Support - SUPPORT CONCIERGE Dedicated team of enterprise account specialists to help with billing and account subjects

351) Which resource is the MOST EFFECTIVE for keeping current on AWS security announcements?

- A. AWS Personal Health Dashboard
- B. AWS Secrets Manager
- C. AWS Security Bulletins
- D. Amazon Inspector

Correct Answer: C

AWS makes public notifications in the form of [Security Bulletins](#), which are posted in the AWS Security website. Individuals, companies, and security teams typically post their advisories on their own websites and in other forums and when relevant, we will include links to those third-party resources in AWS Security Bulletins.



352) Which AWS services aid in application performance optimization by lowering latency associated with global content access? (Select two.)

- A. Amazon CloudFront
- B. AWS VPN
- C. AWS Direct Connect
- D. AWS Global Accelerator
- E. Amazon S3 Glacier

Correct Answer: AD

Amazon CloudFront is a content delivery network (CDN) service built for high performance, security, and developer convenience.

AWS Global Accelerator is a networking service that helps you improve the availability, performance, and security of your public applications. Global Accelerator provides two global static public IPs that act as a fixed entry point to your application endpoints, such as Application Load Balancers, Network Load Balancers, Amazon Elastic Compute Cloud (EC2) instances, and elastic IPs.

353) Which AWS service should a company use to create a NoSQL database?

- A. Amazon Aurora
- B. Amazon DynamoDB
- C. Amazon Redshift
- D. Amazon Neptune

Correct Answer: *B*

AWS DynamoDB is a fully managed NoSQL database service that is designed to provide fast and predictable performance with seamless scalability. It is a good choice for companies looking to create a NoSQL database in AWS.

354) Which techniques are available for deriving AWS charges by department? (Select two.)

- A. Enable multi-factor authentication for the AWS account root user.
- B. Create separate accounts for each department.
- C. Use Reserved Instances whenever possible.
- D. Use tags to associate each instance with a particular department.
- E. Pay bills using purchase orders.

Correct Answer: *BD*

355) Which AWS services can be utilized to automate infrastructure? (Select two.)

- A. AWS CloudFormation
- B. Amazon CloudFront
- C. AWS Batch
- D. AWS OpsWorks
- E. Amazon QuickSight

Correct Answer: AD

356) The solutions architect of a business want to deploy a few Amazon EC2 instances in an already-existing AWS account. Before the firm can accept the request, it wants a cost estimate.

Which AWS tool should be used to generate the cost estimate?

- A. AWS Pricing Calculator
- B. Cost Explorer
- C. AWS Cost and Usage Report
- D. AWS Budgets

Correct Answer: A

AWS Pricing Calculator is a web-based planning tool that you can use to create estimates for your AWS use cases. You can use it to model your solutions before building them, explore the AWS service price points, and review the calculations behind your estimates. You can use it to help you plan how you spend, find cost saving opportunities, and make informed decisions when using Amazon Web Services.

357) A company is migrating to Amazon S3. The company needs to transfer 60 TB of data from an on-premises data center to AWS within 10 days.

Which AWS service should the company use to accomplish this migration?

- A. Amazon S3 Glacier
- B. AWS Database Migration Service (AWS DMS)
- C. AWS Snowball
- D. AWS Direct Connect

Correct Answer: C

358) What type of database is Amazon DynamoDB?

- A. In-memory
- B. Relational
- C. Key-value
- D. Graph

Correct Answer: C

Amazon DynamoDB is a fully managed, serverless, key-value NoSQL database designed to run high-performance applications at any scale

359) A retail company has recently migrated its website to AWS. The company wants to ensure that it is protected from SQL injection attacks. The website uses an Application Load Balancer to distribute traffic to multiple Amazon EC2 instances. Which AWS service or feature can be used to create a custom rule that blocks SQL injection attacks?

- A. Security groups
- B. AWS WAF
- C. Network ACLs
- D. AWS Shield

Correct Answer: B

360) Which AWS services enable users to link their AWS Cloud resources to their on-premises resources? (Select two.)

- A. AWS VPN
- B. Amazon Connect
- C. Amazon Cognito
- D. AWS Direct Connect
- E. AWS Managed Services

Correct Answer: AD

361) While an Amazon EC2 instance is only activated when it is required, it must stay active throughout the life of the procedure.

What is the most acceptable method of purchase?

- A. Dedicated Instances
- B. Spot Instances
- C. On-Demand Instances
- D. Reserved Instances

Correct Answer: C

362) A business's operations are conducted on-site. The business want to anticipate the costs associated with hosting a major application on AWS.

Which AWS service or tool does the business have access to in order to collect this information?

- A. AWS Pricing Calculator
- B. AWS Budgets
- C. AWS Trusted Advisor
- D. Cost Explorer

Correct Answer: A

363) How can a client strengthen the security of their Amazon Web Services (AWS) account logins? (Select two.)

- A. Configure AWS Certificate Manager
- B. Enable Multi-Factor Authentication (MFA)
- C. Use Amazon Cognito to manage access
- D. Configure a strong password policy
- E. Enable AWS Organizations

Correct Answer: *BD*

Your root account should always be protected by Multi-Factor Authentication (MFA). This additional layer of security helps protect against unauthorized logins to your account by requiring two factors: something you know (a password) and something you have (for example, an MFA device). AWS supports virtual and hardware MFA devices and U2F security keys.

364) A big firm often has a single Amazon Web Services (AWS) account.

What are the benefits of repurposing a single AWS account to create additional AWS accounts? (Select two.)

- A. It allows for administrative isolation between different workloads.
- B. Discounts can be applied on a quarterly basis by submitting cases in the AWS Management Console.
- C. Transitioning objects from Amazon S3 to Amazon S3 Glacier in separate AWS accounts will be less expensive.
- D. Having multiple accounts reduces the risks associated with malicious activity targeted at a single account.
- E. Amazon QuickSight offers access to a cost tool that provides application-specific recommendations for environments running in multiple accounts.

Correct Answer: AD

365) Which solution enables a business with numerous AWS accounts to consolidate its consumption in order to qualify for bulk discounts?

- A. AWS Server Migration Service
- B. AWS Organizations
- C. AWS Budgets
- D. AWS Trusted Advisor

Correct Answer: B

Use the consolidated billing feature in AWS Organizations to consolidate billing and payment for multiple AWS accounts or multiple Amazon Internet Services Pvt.

Ltd (AISPL) accounts. Every organization in AWS Organizations has a master account that pays the charges of all the member accounts.

Consolidated billing has the following benefits:

- ☞ One bill - You get one bill for multiple accounts.
- ☞ Easy tracking - You can track the charges across multiple accounts and download the combined cost and usage data.
- ☞ Combined usage -You can combine the usage across all accounts in the organization to share the volume pricing discounts and Reserved Instance discounts. This can result in a lower charge for your project, department, or company than with individual standalone accounts.
- ☞ No extra fee Consolidated billing is offered at no additional cost.

366) Which AWS services may be protected against typical online exploitations using AWS WAF? (Select two.)

- A. Amazon Route 53
- B. Amazon CloudFront
- C. AWS Transfer Family
- D. AWS Site-to-Site VPN
- E. Amazon API Gateway

Correct Answer: BE

367) A business uses an Amazon EC2 Auto Scaling policy in conjunction with an Application Load Balancer to restore sick apps running on Amazon EC2 instances automatically.

This activity pertains to which pillar of the AWS Well-Architected Framework?

- A. Security
- B. Performance efficiency
- C. Operational excellence
- D. Reliability

Correct Answer: D

368) A business want to migrate current software licenses to AWS, however the licensing strategy involves licensing physical cores.

How can the organization do this in the AWS Cloud?

- A. Launch an Amazon EC2 instance with default tenancy.
- B. Launch an Amazon EC2 instance on a Dedicated Host.
- C. Create an On-Demand Capacity Reservation.
- D. Purchase Dedicated Reserved Instances.

Correct Answer: B

369) Which service offers nearly infinite online storage for very durable objects?

- A. Amazon Redshift
- B. Amazon Elastic File System (Amazon EFS)
- C. Amazon Elastic Container Service (Amazon ECS)
- D. Amazon S3

Correct Answer: D

370) Which of the following is an advantage that users experience when they move on-premises workloads to the AWS Cloud?

- A. Elimination of expenses for running and maintaining data centers
- B. Price discounts that are identical to discounts from hardware providers
- C. Distribution of all operational controls to AWS
- D. Elimination of operational expenses

Correct Answer: A

371) Which AWS services are available for file storage? (Select two.)

- A. Amazon S3
- B. AWS Lambda
- C. Amazon Elastic Block Store (Amazon EBS)
- D. Amazon SageMaker
- E. AWS Storage Gateway

Correct Answer: AC

372) A media business want to disseminate video material through the internet to millions of viewers globally. The organization wishes to use AWS's worldwide network backbone in order to deliver cached material with minimal latency and fast data transfer rates.

Which AWS service will satisfy these criteria?

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

Correct Answer: A

373) Which AWS advantage allows customers to construct cloud infrastructure that spans various geographic areas and is linked through a low-latency, high-performance network?

- A. Economies of scale
- B. Security
- C. Elasticity
- D. Global reach

Correct Answer: D

374) Which AWS service or feature enables businesses to take advantage of AWS's volume discounts?

- A. Saving Plans
- B. AWS Budgets
- C. AWS Organizations
- D. AWS Pricing Calculator

Correct Answer: C

Manage costs and optimize usage

AWS Organizations enables you to simplify costs and take advantage of quantity discounts with a single bill. In addition, you can optimize usage across your organization with services like AWS Compute Optimizer and AWS Cost Explorer.

375) Which AWS IAM feature is used to link numerous users with a set of permissions?

- A. Multi-factor authentication
- B. Groups
- C. Password policies
- D. Access keys

Correct Answer: B

An IAM group is a collection of IAM users. You can use groups to specify permissions for a collection of users, which can make those permissions easier to manage for those users. For example, you could have a group called Admins and give that group the types of permissions that administrators typically need.

376) A social media firm has been tasked with the responsibility of launching a new function. Users will be able to share photographs that will be seen by other users worldwide with little delay.

Which AWS service or feature should the business use in order to achieve this demand the most cost-effectively?

- A. Amazon DynamoDB global tables
- B. AWS Direct Connect
- C. Amazon CloudFront
- D. AWS Outposts

Correct Answer: C

Securely deliver content with low latency and high transfer speeds.

377) Which AWS service enables application decoupling?

- A. AWS Config
- B. Amazon Simple Queue Service (Amazon SQS)
- C. AWS Batch
- D. Amazon Simple Email Service (Amazon SES)

Correct Answer: B

Amazon SQS refers to a **message queuing service that is used for decoupling and scaling microservices, distributed systems, and serverless applications**. SQS removes the complexity and overhead linked with managing and operating message-oriented middleware and empowers developers for focusing on differentiating work.

378) Amazon EC2 web servers connect to a traditional application operating in a corporate data center.

What phrase would be appropriate to use to describe this model?

- A. Cloud-native
- B. Partner network
- C. Hybrid architecture
- D. Infrastructure as a service

Correct Answer: C

AWS hybrid cloud services deliver a consistent AWS experience wherever you need it – from the cloud, to on premises, and at the edge. Select from the broadest set of compute, networking, storage, security, identity, data integration, management, monitoring, and operations services to build hybrid architectures that meet your specific requirements and use cases.

379) Which design principle is included in the operational excellence pillar of the AWS Well-Architected Framework?

- A. Create annotated documentation.
- B. Anticipate failure.
- C. Ensure performance efficiency.
- D. Optimize costs.

Correct Answer: *B*

380) Which of the following is the customer responsible for updating and patching, according to the AWS shared responsibility model?

- A. Amazon FSx for Windows File Server
- B. Amazon WorkSpaces virtual Windows desktop
- C. AWS Directory Service for Microsoft Active Directory
- D. Amazon RDS for Microsoft SQL Server

Correct Answer: B

381) A previously utilized Amazon EC2 instance for development is no longer available and does not display in the AWS Management Console.

Which AWS service should be utilized to discover what activity resulted in the inaccessibility of this EC2 instance?

- A. Amazon CloudWatch Logs
- B. AWS Security Hub
- C. Amazon Inspector
- D. AWS CloudTrail

Correct Answer: D

Visibility into your AWS account activity is a key aspect of security and operational best practices. You can use CloudTrail to view, search, download, archive, analyze, and respond to account activity across your AWS infrastructure. You can identify who or what took which action, what resources were acted upon, when the event occurred, and other details to help you analyze and respond to activity in your AWS account. Optionally, you can enable AWS CloudTrail Insights on a trail to help you identify and respond to unusual activity.

382) A Cloud Practitioner is required to retain data for seven years in order to comply with regulatory standards.

Which AWS service meets this need for the LEAST amount of money?

- A. Amazon S3
- B. AWS Snowball
- C. Amazon Redshift
- D. Amazon S3 Glacier

Correct Answer: D

S3 Glacier Deep Archive is Amazon S3's lowest-cost storage class and supports long-term retention and digital preservation for data that may be accessed once or twice in a year. It is designed for customers "particularly those in highly-regulated industries, such as the Financial Services, Healthcare, and Public Sectors" that retain data sets for 7-10 years or longer to meet regulatory compliance requirements. S3 Glacier Deep Archive can also be used for backup and disaster recovery use cases, and is a cost-effective and easy-to-manage alternative to magnetic tape systems, whether they are on-premises libraries or off-premises services.

383) Why is an AWS Well-Architected review a critical part of the cloud design process?

- A. A Well-Architected review is mandatory before a workload can run on AWS.
- B. A Well-Architected review helps identify design gaps and helps evaluate design decisions and related documents.
- C. A Well-Architected review is an audit mechanism that is a part of requirements for service level agreements.
- D. A Well-Architected review eliminates the need for ongoing auditing and compliance tests.

Correct Answer: B

384) A company implements an Amazon EC2 Auto Scaling policy along with an Application Load Balancer to automatically recover unhealthy applications that run on Amazon EC2 instances.

Which pillar of the AWS Well-Architected Framework does this action cover?

- A. Security
- B. Performance efficiency
- C. Operational excellence
- D. Reliability

Correct Answer: D

385) What does AWS's obligation under the shared responsibility paradigm entail?

- A. Updating the network ACLs to block traffic to vulnerable ports.
- B. Patching operating systems running on Amazon EC2 instances.
- C. Updating the firmware on the underlying EC2 hosts.
- D. Updating the security group rules to block traffic to the vulnerable ports.

Correct Answer: C

386) AWS CloudFormation is intended to assist the user in the following ways:

- A. model and provision resources.
- B. update application code.
- C. set up data lakes.
- D. create reports for billing.

Correct Answer: A

AWS CloudFormation provides a common language for you to model and provision AWS and third party application resources in your cloud environment. AWS

CloudFormation allows you to use programming languages or a simple text file to model and provision, in an automated and secure manner, all the resources needed for your applications across all regions and accounts. This gives you a single source of truth for your AWS and third party resources.

387) Which AWS Cloud benefit is shown by an architecture's ability to withstand failures with minimal downtime?

- A. Agility
- B. Elasticity
- C. Scalability
- D. High availability

Correct Answer: D

388) Under the AWS shared responsibility model, which task is the customer's responsibility when managing AWS Lambda functions?

- A. Creating versions of Lambda functions
- B. Maintaining server and operating systems
- C. Scaling Lambda resources according to demand
- D. Updating the Lambda runtime environment

Correct Answer: A

389) A company needs to generate reports that can break down cloud costs by product, by company-defined tags, and by hour, day, and month.

Which AWS tool should the company use to meet these requirements?

- A. Reserved Instance utilization and coverage reports
- B. Savings Plans utilization reports
- C. AWS Budgets reports
- D. AWS Cost and Usage Reports

Correct Answer: D

AWS Cost and Usage Reports tracks your AWS usage and provides estimated charges associated with your account. Each report contains line items for each unique combination of AWS products, usage type, and operation that you use in your AWS account. You can customize the AWS Cost and Usage Reports to aggregate the information either by the hour, day, or month.

390) A business wishes to grant access to Amazon RDS to one of its workers. Additionally, the corporation wishes to confine contact to the AWS CLI and AWS software development kits (SDKs). Which combination of measures should the business do in order to satisfy these needs while adhering to the concept of least privilege? (Select two.)

- A. Create an IAM user and provide AWS Management Console access only.
- B. Create an IAM user and provide programmatic access only.
- C. Create an IAM role and provide AWS Management Console access only.
- D. Create an IAM policy with administrator access and attach it to the IAM user.
- E. Create an IAM policy with Amazon RDS access and attach it to the IAM user.

Correct Answer: BE

391) Which of the following guidelines constitutes a well-architected design philosophy for cloud application development?

- A. Keep static data closer to compute resources.
- B. Provision resources for peak capacity.
- C. Design for automated recovery from failure.
- D. Use tightly coupled components.

Correct Answer: C

Automatically recover from failure: By monitoring a workload for key performance indicators (KPIs), you can trigger automation when a threshold is breached. These KPIs should be a measure of business value, not of the technical aspects of the operation of the service. This allows for automatic notification and tracking of failures, and for automated recovery processes that work around or repair the failure. With more sophisticated automation, it's possible to anticipate and remediate failures before they occur.

392) A company has a serverless application that includes an Amazon API Gateway API, an AWS Lambda function, and an Amazon DynamoDB database.

Which AWS service can the company use to trace user requests as they move through the application's components?

- A. AWS CloudTrail
- B. Amazon CloudWatch
- C. Amazon Inspector
- D. AWS X-Ray

Correct Answer: D

AWS X-Ray - It provides a complete view of requests as they travel through your application and filters visual data across payloads, functions, traces, services, APIs, and more with no-code and low-code motions.

393) A company needs to set up a petabyte-scale data warehouse in the AWS Cloud. Which AWS service will meet this requirement?

- A. Amazon DynamoDB
- B. Amazon RDS
- C. Amazon Redshift
- D. Amazon ElastiCache

Correct Answer: C

Amazon Redshift is a fast, fully managed, petabyte-scale data warehouse service that makes it simple and cost-effective to efficiently analyze all your data using your existing business intelligence tools.

394) What are the immediate advantages of AWS Cloud computing? (Select two.)

- A. Increased IT staff.
- B. Capital expenses are replaced with variable expenses.
- C. User control of infrastructure.
- D. Increased agility.
- E. AWS holds responsibility for security in the cloud.

Correct Answer: *BD*

395) The following are the economical advantages of using AWS: (Choose two.)

- A. reduced Total Cost of Ownership (TCO).
- B. increased capital expenditure (capex).
- C. reduced operational expenditure (opex).
- D. deferred payment plans for startups.
- E. business credit lines for startups.

Correct Answer: AC

396) Which AWS service is always provided at no charge?

- A. Amazon S3
- B. AWS Identity and Access Management (IAM)
- C. Elastic Load Balancers
- D. AWS WAF

Correct Answer: B

"You can interact with IAM through the web-based IAM console, the AWS Command Line Interface, or the AWS API or SDKs. IAM is offered at no additional charge. "

397) Which acts exemplify excellent practices for AWS IAM use? (Select two.)

- A. Configure a strong password policy
- B. Share the security credentials among users of AWS accounts who are in the same Region
- C. Use access keys to log in to the AWS Management Console
- D. Rotate access keys on a regular basis
- E. Avoid using IAM roles to delegate permissions

Correct Answer: AD

398) A business want to establish templates that it may reuse when deploying numerous AWS resources.

Which Amazon Web Services (AWS) offering or functionality can the business employ to achieve this requirement?

- A. AWS Marketplace
- B. Amazon Machine Image (AMI)
- C. AWS CloudFormation
- D. AWS OpsWorks

Correct Answer: C

After you have your stacks and resources set up, you can reuse your templates to replicate your infrastructure in multiple environments.

[AWS CloudFormation](#) simplifies provisioning and management on AWS. You can create templates for the service or application architectures you want and have AWS CloudFormation use those templates for quick and reliable provisioning of the services or applications (called "stacks"). You can also easily update or replicate the stacks as needed

399) How can a business use AWS to lower its Total Cost of Ownership (TCO)?

- A. By minimizing large capital expenditures
- B. By having no responsibility for third-party license costs
- C. By having no operational expenditures
- D. By having AWS manage applications

Correct Answer: A

AWS helps you reduce Total Cost of Ownership (TCO) by reducing the need to invest in large capital expenditures and providing a pay-as-you-go model that empowers you to invest in the capacity you need and use it only when the business requires it.

400) A business's website is hosted on Amazon EC2 instances. The firm must guarantee that the website is accessible to a worldwide audience and has a low latency for visitors.

Which Amazon Web Services (AWS) offering should the business employ to achieve these requirements?

- A. Amazon Route 53
- B. Amazon CloudFront
- C. Elastic Load Balancing
- D. AWS Lambda

Correct Answer: *B*

CloudFront – Users can secure access to their websites and enable fast access worldwide.

401) A business employs Amazon EC2 infrastructure to host steady-state workloads and is looking to save money.

Which pricing model for EC2 instances should the business choose?

- A. Reserved Instances
- B. On-Demand Instances
- C. Spot Instances
- D. Dedicated Hosts

Correct Answer: A

Amazon Reserved Instances are a great way to save money on AWS. Whether you're looking to save on EC2, RDS, ElastiCache, Elasticsearch, or Redshift, there are options to save **30-70%** compared to on-demand costs.

402) Which actions should a user take if he or she detects a hacked AWS account? (Make a selection of at least two.)

- A. Remove any multi-factor authentication (MFA) tokens.
- B. Rotate and delete all AWS access keys.
- C. Move resources to a different AWS Region.
- D. Delete AWS CloudTrail resources.
- E. Contact AWS Support.

Correct Answer: BE

403) Which job, in accordance with the AWS shared responsibility model, is AWS's duty for workloads operating on Amazon EC2?

- A. Updating the physical hardware
- B. Updating the operating system
- C. Updating the database engine
- D. Updating the user data

Correct Answer: A

404) How can AWS MOST effectively cut a rising start-computing's costs?

- A. It provides on-demand resources for peak usage.
- B. It automates the provisioning of individual developer environments.
- C. It automates customer relationship management.
- D. It implements a fixed monthly computing budget.

Correct Answer: A

You can continue to optimize your spend and keep your development costs low by making sure you revisit your architecture often, to adjust to your startup growth.

Manage your cost further by leveraging different options such as S3 CloudFront for caching & offloading to reduce cost of EC2 computing, as well as Elastic Load Balancing which prepares you for massive scale, high reliability and uninterrupted growth. Another way to keep costs down is to use AWS Identity and Access Management solutions (IAM) to manage governance of your cost drivers effectively and by the right teams.

405) Which service manages objects by storing them, providing real-time access to them, and managing their versions and lifecycles?

- A. Amazon Glacier
- B. AWS Storage Gateway
- C. Amazon S3
- D. Amazon EBS

Correct Answer: C

406) Which Amazon Web Services (AWS) service may be used to securely store and manage source code versions?

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

Correct Answer: 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.

407) Which tool may be used to track planned AWS infrastructure changes?

- A. AWS Personal Health Dashboard
- B. AWS Trusted Advisor
- C. Billing Dashboard
- D. AWS Config

Correct Answer: D

Amazon Web Services (AWS) introduced **AWS Config in 2014** to help users of their services track changes to the configuration of EC2 instances and other AWS resources. This offering was further enhanced in following years with the introduction of AWS Config Rules.

408) A company needs to design an AWS disaster recovery plan to cover multiple geographic areas. Which action will meet this requirement?

- A. Configure multiple AWS accounts.
- B. Configure the architecture across multiple Availability Zones in an AWS Region.
- C. Configure the architecture across multiple AWS Regions.
- D. Configure the architecture among many edge locations.

Correct Answer: C

409) Which of the following are AWS security recommended practices for managing an AWS account's root user using AWS Identity and Access Management (IAM)? (Choose two.)

- A. Set up multi-factor authentication (MFA) for the root user.
- B. Remove all IAM policies from the root user.
- C. Delete the root user access keys.
- D. Use the root user for daily tasks.
- E. Assign a read-only access policy to the root user.

Correct Answer: AC

- For increased security, we recommend that you configure multi-factor authentication (MFA) to **help protect your AWS resources**.
- You should never have access keys for your root user, you should delete or deactivate them immediately. The reason for this is **access keys cannot have an MFA device linked to them**, so if you were to accidentally leave them somewhere public, like a GitHub repository, then anyone with them can immediately use them.

410) Which AWS Support package is the LEAST costly and gives 24-hour access to AWS customer care and communities?

- A. AWS Enterprise Support
- B. AWS Business Support
- C. AWS Developer Support
- D. AWS Basic Support

Correct Answer: D

Basic Support is included for all **AWS customers** and includes: Customer Service and Communities - 24x7 access to customer service, documentation , whitepapers , and AWS re:Post. **AWS Trusted Advisor - Access to core Trusted Advisor** checks and guidance to provision your resources following best practices to increase performance and improve security.

411) A firm that does business online must supply new capabilities rapidly and iteratively, decreasing time to market.

Which AWS Cloud function is capable of doing this?

- A. Elasticity
- B. High availability
- C. Agility
- D. Reliability

Correct Answer: C

Agility is the **ability to react quickly**. In cloud, it takes a minute or two to create a Virtual Machine that is up and running. On the other hands, it takes days or weeks when we submit a request to purchase a physical server and by when it gets delivered.

412) A business has a concentrated group of users with significant file storage needs that outstrip the available capacity on-premises. The organization wishes to expand its file storage capacities for this group while maintaining the performance advantages associated with local content sharing.

Which AWS option is the MOST OPERATIONALLY EFFECTIVE in this scenario?

- A. Create an Amazon S3 bucket for each user. Mount each bucket by using an S3 file system mounting utility.
- B. Configure and deploy an AWS Storage Gateway file gateway. Connect each user's workstation to the file gateway.
- C. Move each user's working environment to Amazon WorkSpaces. Set up an Amazon WorkDocs account for each user.
- D. Deploy an Amazon EC2 instance and attach an Amazon Elastic Block Store (Amazon EBS) Provisioned IOPS volume. Share the EBS volume directly with the users.

Correct Answer: B

413) Which AWS feature enables a business to use consumption levels across different member accounts?

- A. Service control policies (SCPs)
- B. Consolidated billing
- C. All Upfront Reserved Instances
- D. AWS Cost Explorer

Correct Answer: B

MONTHLY CONSOLIDATED INVOICING AND CHARGEBACK REPORTING **Each month you receive a single, consolidated invoice for your previous month's AWS consumption across all linked accounts**, summarized by AWS service.

414) To utilize the AWS CLI, users must produce the following:

- A. a password policy.
- B. an access/secret key.
- C. a managed policy.
- D. an API key.

Correct Answer: B

To use the CLI one must generate a manage policy. To access it one must use the secret access key.

415) Which of the following is a benefit of moving from an on-premises data center to the AWS Cloud?

- A. Compute instances can be launched and terminated as needed to optimize costs.
- B. Compute costs can be viewed in the AWS Billing and Cost Management console.
- C. Users retain full administrative access to their compute instances.
- D. Users can optimize costs by permanently running enough instances at peak load.

Correct Answer: A

416) Which AWS service monitors AWS accounts for security threats?

- A. Amazon GuardDuty
- B. AWS Secrets Manager
- C. Amazon Cognito
- D. AWS Certificate Manager (ACM)

Correct Answer: A

Amazon GuardDuty is a threat detection service that continuously monitors your AWS accounts and workloads for malicious activity and delivers detailed security findings for visibility and remediation

417) Which AWS solution enables customers to extend AWS infrastructure, AWS services, APIs, and tools to data centers, co-location settings, or on-premises facilities through a hybrid architecture?

- A. AWS Snowmobile
- B. AWS Local Zones
- C. AWS Outposts
- D. AWS Fargate

Correct Answer: C

With AWS Outposts, you can run some AWS services locally and connect to a broad range of services available in the local AWS Region. Run applications and workloads on premises using familiar AWS services, tools, and APIs. Outposts supports workloads and devices requiring low latency access to on-premises systems, local data processing, data residency, and application migration with local system interdependencies.

418) Which service allows consumers to audit AWS API calls?

- A. AWS CloudTrail
- B. AWS Trusted Advisor
- C. Amazon Inspector
- D. AWS X-Ray

Correct Answer: A

CloudTrail is a service offered by AWS that captures a log of all API calls for an AWS account and its services. CloudTrail enables continuous monitoring and post-incident forensic investigations of AWS by providing an audit trail of all activities across an AWS infrastructure. All CloudTrail logs files get stored in a dedicated S3 bucket.

419) Which AWS service would be utilized to manage AWS access across numerous accounts in a centralized fashion?

- A. AWS Service Catalog
- B. AWS Config
- C. AWS Trusted Advisor
- D. AWS Organizations

Correct Answer: D

To improve control over your AWS environment, you can use AWS Organizations to create groups of accounts, and then attach policies to a group to ensure the correct policies are applied across the accounts without requiring custom scripts and manual processes.

420) Which benefit is included with an AWS Enterprise Support plan?

- A. AWS Partner Network (APN) support at no cost.
- B. Designated support from an AWS technical account manager (TAM)
- C. On-site support from AWS engineers
- D. AWS managed compliance as code with AWS Config

Correct Answer: *B*

421) Which task does AWS perform automatically?

- A. Encrypt data that is stored in Amazon DynamoDB.
- B. Patch Amazon EC2 instances.
- C. Encrypt user network traffic.
- D. Create TLS certificates for users' websites.

Correct Answer: A

All user data stored in Amazon DynamoDB is fully encrypted at rest. DynamoDB encryption at rest provides enhanced security by encrypting all your data at rest using encryption keys stored in AWS Key Management Service (AWS KMS)

422) Which Amazon Web Offerings (AWS) services provide computational capabilities? (Select two.)

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

Correct Answer: AE

423) Which opportunities does AWS provide for clients interested in learning about cloud security in an instructor-led training? (Select two.)

- A. AWS Trusted Advisor
- B. AWS Online Tech Talks
- C. AWS Blog
- D. AWS Forums
- E. AWS Classroom Training

Correct Answer: BE

AWS Online Tech Talks cover a range of topics and expertise levels, and feature technical deep dives, demonstrations, customer examples, and live Q&A with AWS experts.

424) A business wishes to launch a worldwide commercial application using Amazon Elastic Compute Cloud (Amazon EC2). The deployment solution should be constructed with the greatest degree of redundancy and fault tolerance possible.

According to this scenario, the following Amazon EC2 instances should be deployed:

- A. in a single Availability Zone in one AWS Region
- B. with multiple Elastic Network Interfaces belonging to different subnets
- C. across multiple Availability Zones in one AWS Region
- D. across multiple Availability Zones in two AWS Regions

Correct Answer: D

425) Which tool is most suited for integrating the billing of previously distinct AWS accounts?

- A. Detailed billing report
- B. Consolidated billing
- C. AWS Cost and Usage report
- D. Cost allocation report

Correct Answer: B

Consolidated billing has the following benefits:

- **One bill** – You get one bill for multiple accounts.
- **Easy tracking** – You can track the charges across multiple accounts and download the combined cost and usage data.
- **Combined usage** – You can combine the usage across all accounts in the organization to share the volume pricing discounts, Reserved Instance discounts, and Savings Plans. This can result in a lower charge for your project, department, or company than with individual standalone accounts. For more information, see [Volume discounts](#).
- **No extra fee** – Consolidated billing is offered at no additional cost.

426) Which AWS service or tool can a company use to visualize, understand, and manage AWS spending and usage over time?

- A. AWS Trusted Advisor
- B. Amazon CloudWatch
- C. Cost Explorer
- D. AWS Budgets

Correct Answer: C

427) How can deploying an application across several Availability Zones benefit you?

- A. There is a lower risk of service failure if a natural disaster causes a service disruption in a given AWS Region.
- B. The application will have higher availability because it can withstand a service disruption in one Availability Zone.
- C. There will be better coverage as Availability Zones are geographically distant and can serve a wider area.
- D. There will be decreased application latency that will improve the user experience.

Correct Answer: B

428) Which of the following enables AWS customers to control billing expense allocations?

- A. Tagging resources
- B. Limiting who can create resources
- C. Adding a secondary payment method
- D. Running all operations on a single AWS account

Correct Answer: A

AWS tags allow you to define a tag like "**billing_service**" or "**team**" or "**cost center**" and then apply that to as many AWS resources as needed. You're able to apply each tag to more than one resource, and you're able to apply up to 50 tags to each resource. At the end of each billing period, AWS generates a comma-separated value document.

429) A business is developing an application that will be hosted in a single AWS Region and will serve end customers located around the globe. The firm wishes to give low-latency access to application data to end users.

Which of the following services will assist you in achieving your goal?

- A. Amazon CloudFront
- B. AWS Direct Connect
- C. Amazon Route 53 global DNS
- D. Amazon Simple Storage Service (Amazon S3) transfer acceleration

Correct Answer: A

Amazon CloudFront features can be customized for your specific application requirements. Extend your custom code across AWS locations worldwide, allowing you to move even complex application logic closer to your end users to improve responsiveness.

430) The application of a business has a variable start and finish time.

Which pricing option for Amazon EC2 will be the MOST cost-effective?

- A. On-Demand Instances
- B. Spot Instances
- C. Reserved Instances
- D. Dedicated Hosts

Correct Answer: B

Spot instances

Amazon EC2 Spot instances allow you to request spare Amazon EC2 computing capacity for up to 90% off the On-Demand price. [Learn More.](#)

Spot instances are recommended for:

- Applications that have flexible start and end times
- Applications that are only feasible at very low compute prices
- Users with urgent computing needs for large amounts of additional capacity

[See Spot pricing »](#)

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431) A new application is being developed by a business that will save and retrieve millions of photographs and movies.

Which AWS service or feature offers the CHEAPEST underlying storage?

- A. Amazon EC2 instance store
- B. Amazon Elastic Block Store (Amazon EBS)
- C. Amazon S3
- D. Amazon Simple Queue Service (Amazon SQS)

Correct Answer: C

Amazon S3 is cheapest for data storage alone.

432) A business intends to use the AWS Cloud to host a huge ecommerce application. The business must have an architecture that safeguards against network-based security threats such as DDoS assaults.

Which Amazon Web Offerings (AWS) services should the business employ to achieve this requirement? (Select two.)

- A. Amazon Inspector
- B. Amazon GuardDuty
- C. Amazon CloudFront
- D. AWS Shield
- E. AWS Identity and Access Management (IAM)

Correct Answer: CD

AWS WAF is a web application firewall that can be deployed on CloudFront to help protect your application against DDoS attacks by giving you control over which traffic to allow or block by defining security rules

AWS Shield is a managed Distributed Denial of Service (DDoS) protection service that safeguards applications running on AWS.

433) Which AWS service or functionality enables the user to control application traffic between regions?

- A. Amazon AppStream 2.0
- B. Amazon VPC
- C. Elastic Load Balancer
- D. Amazon Route 53

Correct Answer: D

Amazon Route 53 – **Geoproximity Routing Policy** (source AWS docs)

Geoproximity routing lets Amazon Route 53 route traffic to your resources based on the geographic location of your users and your resources.

434) A company requires an isolated environment within AWS for security purposes. Which action can be taken to accomplish this?

- A. Create a separate Availability Zone to host the resources.
- B. Create a separate VPC to host the resources.
- C. Create a placement group to host the resources.
- D. Create an AWS Direct Connect connection between the company and AWS.

Correct Answer: B

Network isolation

A virtual private cloud (VPC) is a virtual network in your own logically isolated area in the AWS Cloud. Use separate VPCs to isolate infrastructure by workload or organizational entity.

A subnet is a range of IP addresses in a VPC. When you launch an instance, you launch it into a subnet in your VPC. Use subnets to isolate the tiers of your application (for example, web, application, and database) within a single VPC. Use private subnets for your instances if they should not be accessed directly from the internet.

To call the Amazon EC2 API from your VPC without sending traffic over the public internet, use AWS PrivateLink.

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435) What expenses should be addressed when comparing the total cost of ownership (TCO) of an on-premises infrastructure to a cloud architecture? (Select two.)

- A. The credit card processing fees for application transactions in the cloud.
- B. The cost of purchasing and installing server hardware in the on-premises data.
- C. The cost of administering the infrastructure, including operating system and software installations, patches, backups, and recovering from failures.
- D. The costs of third-party penetration testing.
- E. The advertising costs associated with an ongoing enterprise-wide campaign.

Correct Answer: BC

436) Which service is an AWS-managed Hadoop framework that enables processing massive volumes of data across dynamically expandable Amazon EC2 instances simple, quick, and cost-effective?

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

Correct Answer: A

Amazon EMR (Amazon Elastic MapReduce) provides a managed Hadoop framework using the elastic infrastructure of Amazon EC2 and Amazon S3. It distributes computation of the data over multiple Amazon EC2 instances.

437) What is the greatest place for a user to get information and reports on AWS compliance?

- A. AWS Artifact
- B. AWS Marketplace
- C. Amazon Inspector
- D. AWS Support

Correct Answer: A

AWS Artifact – AWS Artifact is your go-to, central resource for compliance-related information that matters to you. It provides on-demand access to AWS's security and compliance reports and select online agreements.

438) A business wishes to be alerted when its AWS Cloud expenses or usage surpass certain limits.

Which Amazon Web Services (AWS) offering will meet these requirements?

- A. AWS Budgets
- B. Cost Explorer
- C. AWS CloudTrail
- D. Amazon Macie

Correct Answer: A

AWS Budgets allows you to set custom budgets to track your cost and usage from the simplest to the most complex use cases. With AWS Budgets, you can choose to be alerted by email or SNS notification when actual or forecasted cost and usage exceed your budget threshold, or when your actual RI and Savings Plans' utilization or coverage drops below your desired threshold.

439) Which AWS service is a highly available and scalable DNS web service?

- A. Amazon VPC
- B. Amazon CloudFront
- C. Amazon Route 53
- D. Amazon Connect

Correct Answer: C

Amazon Route 53 is a highly available and scalable cloud Domain Name System (DNS) web service.

440) A business needs to monitor changes to AWS resource configurations for compliance purposes.

Which Amazon Web Services functionality may be utilized to fulfill this requirement?

- A. AWS Cost and Usage Report
- B. AWS Organizations service control policies (SCPs)
- C. AWS Config rules
- D. VPC Flow Logs

Correct Answer: C

AWS Config lets you configure rules that you would like your AWS resources to fulfil, and **tracks to see whether the resources comply with those rules**. Every time something is changed, Config records the change. It stores a snap of the system at custom intervals set by the user and even records how one AWS resource relates to another.

441) A customer requests advise on potential cost reductions associated with the migration from on-premises to AWS.

- Which tool is most appropriate in this situation?
- A. AWS Budgets
 - B. Cost Explorer
 - C. AWS Total Cost of Ownership (TCO) Calculator
 - D. AWS Well-Architected Tool

Correct Answer: C

The TCO Calculator provides directional guidance on possible realized savings when deploying AWS. This tool is built on an underlying calculation model, that generates a fair assessment of value that a customer may achieve given the data provided by the user.

442) Which AWS services or functionalities enable customers to establish a network connection between two virtual private clouds (VPCs)? (Select two.)

- A. VPC endpoints
- B. Amazon Route 53
- C. VPC peering
- D. AWS Direct Connect
- E. AWS Transit Gateway

Correct Answer: CE

443) Which of the following is a recommended method for setting IAM user policies?

- A. Start with a large set of permissions and remove the permissions that are not required.
- B. Use only Amazon managed policies.
- C. Start with a minimum set of permissions and grant additional permissions as necessary.
- D. Attach policies directly to each user individually.

Correct Answer: C

Grant least privilege

When you create IAM policies, follow the standard security advice of granting *least privilege*, or granting only the permissions required to perform a task: Determine what users (and roles) need to do and then craft policies that allow them to perform *only* those tasks.

Start with a minimum set of permissions and grant additional permissions as necessary. Doing so is more secure than starting with permissions that are too lenient and then trying to tighten them later.

444) How can consolidated billing benefit a business with many AWS accounts?

- A. It aggregates usage across accounts so that the company can reach volume discount thresholds sooner.
- B. It offers an additional 5% discount on purchases of All Upfront Reserved Instances.
- C. It provides a simplified billing invoice that the company can process more quickly than a standard invoice.
- D. It gives AWS resellers the ability to bill their customers for usage.

Correct Answer: A

Using consolidated billing, you can combine usage from multiple accounts into a single invoice, allowing you to reach the tiers with lower prices faster. You can also apply unused reservations from one account to another account's instance usage.

445) Which of the following is an AWS best practice for managing an AWS account root user?

- A. Keep the root user password with the security team.
- B. Enable multi-factor authentication (MFA) for the root user.
- C. Create an access key for the root user.
- D. Keep the root user password consistent for compliance purposes.

Correct Answer: B

AWS recommends enabling multi-factor authentication (MFA) for the root user of an AWS account to provide an additional layer of security. MFA requires the use of a second form of authentication, such as a one-time code generated by an authentication app or a hardware token, in addition to a password. This makes it much harder for an attacker to gain access to the root user account, even if they have obtained the password.

446) AWS's pay-as-you-go pricing model:

- A. reduces capital expenditures.
- B. requires payment up front for AWS services.
- C. is relevant only for Amazon EC2, Amazon S3, and Amazon RDS.
- D. reduces operational expenditures.

Correct Answer: A

AWS helps you reduce Total Cost of Ownership (TCO) by reducing the need to invest in large **capital expenditures** and providing a **pay-as-you-go** model that empowers you to invest in the capacity you need and use it only when the business requires it

447) What AWS feature relates to a customer's flexibility to scale up and down applications to meet changeable demand?

- A. Elasticity
- B. Agility
- C. Security
- D. Scalability

Correct Answer: D

The ability to increase the size of the workload either software or hardware in your existing infrastructure and at the same time making sure that the performance is not impacted is known as **scalability** in AWS.

448) A company wants to improve its security and audit posture by limiting Amazon EC2 inbound access. What should the company use to access instances remotely instead of opening inbound SSH ports and managing SSH keys?

- A. EC2 key pairs
- B. AWS Systems Manager Session Manager
- C. AWS Identity and Access Management (IAM)
- D. Network ACLs

Correct Answer: B

AWS Systems Manager Session Manager is a new interactive shell and CLI that helps to provide secure, access-controlled, and audited Windows and Linux EC2 instance management. Session Manager removes the need to open inbound ports, manage SSH keys, or use bastion hosts.

449) After selecting an Amazon EC2 Dedicated Host reservation, which pricing option would provide the largest discount?

- A. No upfront payment
- B. Hourly on-demand payment
- C. Partial upfront payment
- D. All upfront payment

Correct Answer: D

You can choose between three payment options when you purchase a Standard or Convertible Reserved Instance. With the All Upfront option, you pay for the entire Reserved Instance term with one upfront payment. This option provides you with the largest discount compared to On-Demand Instance pricing

450) Which AWS Cloud feature enables resource supply to be matched to changing workload demands?

- A. Security
- B. Reliability
- C. Elasticity
- D. High availability

Correct Answer: C

In AWS, **the process of getting the resources dynamically when you actually require them and then release the resources when you are done and do not need them** is known as elasticity.

451) A business has chosen to shift its production workloads to the Amazon Web Services (AWS) Cloud.

Which activities may assist in lowering operating expenses associated with the migration? (Select two.)

- A. Reduce overprovisioned instances.
- B. Rehost all third-party licenses on AWS.
- C. Implement a highly available architecture.
- D. Use managed services.
- E. Improve application security.

Correct Answer: AD

452) A business want to provide a single user complete access to an Amazon S3 bucket.

Which element in the S3 bucket policy contains information about the users who need access to the S3 bucket?

- A. Principal
- B. Action
- C. Resource
- D. Statement

Correct Answer: A

Principal – The account or user who is allowed access to the actions and resources in the statement. In a bucket policy, the principal is the user, account, service, or other entity that is the recipient of this permission.

453) Which Amazon Web Services (AWS) solution enables clients to acquire unused Amazon EC2 capacity at often reduced prices?

- A. Reserved Instances
- B. On-Demand Instances
- C. Dedicated Instances
- D. Spot Instances

Correct Answer: D

A Spot Instance is a standard AWS EC2 instance (machine) that is available for less than the On-Demand price due to spare EC2 capacity. By requesting unused EC2 instances at a discounted price

454) How does the AWS global infrastructure offer high availability and fault tolerance to its users?

- A. The AWS infrastructure is made up of multiple AWS Regions within various Availability Zones located in areas that have low flood risk, and are interconnected with low-latency networks and redundant power supplies.
- B. The AWS infrastructure consists of subnets containing various Availability Zones with multiple data centers located in the same geographic location.
- C. AWS allows users to choose AWS Regions and data centers so that users can select the closest data centers in different Regions.
- D. The AWS infrastructure consists of isolated AWS Regions with independent Availability Zones that are connected with low-latency networking and redundant power supplies.

Correct Answer: D

455) Which of the following procedures should a client perform while doing penetration testing on Amazon Web Services (AWS)?

- A. Conduct penetration testing using Amazon Inspector, and then notify AWS support.
- B. Request and wait for approval from the customer's internal security team, and then conduct testing.
- C. Notify AWS support, and then conduct testing immediately.
- D. Request and wait for approval from AWS support, and then conduct testing.

Correct Answer: B

AWS customers are welcome to carry out security assessments or penetration tests against their AWS infrastructure without prior approval for 8 services

- Amazon EC2 instances, NAT Gateways, and Elastic Load Balancers
- Amazon RDS
- Amazon CloudFront
- Amazon Aurora
- Amazon API Gateways
- AWS Fargate
- AWS Lambda and Lambda Edge functions
- Amazon Lightsail resources
- Amazon Elastic Beanstalk environments

456) Which service would be responsible for network connection in a hybrid design that incorporates Amazon Web Services?

- A. Amazon VPC
- B. AWS Direct Connect
- C. AWS Directory Service
- D. Amazon API Gateway

Correct Answer: B

Hybrid network connection : this component refers to the connection from the on-premises networking edge device to the **AWS** Cloud (it can be physical connection such as **AWS Direct Connect**, or an overlay connection such as a Site-to-Site (S2S) VPN)

457) What is the name given to the several, separate sites inside an AWS Region that are linked by low-latency networks?

- A. AWS Direct Connects
- B. Amazon VPCs
- C. Edge locations
- D. Availability Zones

Correct Answer: D

Availability Zones are interconnected within a region for low latency.

458) Which of the following AWS services can be utilized to efficiently deliver big volumes of online video content? (Select two.)

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

Correct Answer: BE

Amazon CloudFront is configured with the destination S3 bucket as the origin for global distribution of the transcoded video content.

459) Which Amazon EC2 price option is appropriate for applications that need intermittent, spiky, or unexpected workloads?

- A. Spot Instances
- B. Dedicated Hosts
- C. On-Demand Instances
- D. Reserved Instances

Correct Answer: C

On-Demand instances are recommended for :

- Users that prefer the low cost and flexibility of Amazon EC2 without any up-front payment or long-term commitment
- Applications with short-term, spiky, or unpredictable workloads that cannot be interrupted
- Applications being developed or tested on Amazon EC2 for the first time

460) A user is able to set up a master payer account to view consolidated billing reports through:

- A. AWS Budgets.
- B. Amazon Macie.
- C. Amazon QuickSight.
- D. AWS Organizations.

Correct Answer: D

AWS Organizations "You can track the charges across multiple accounts and download the combined cost and usage data."

461) Which of the following is a duty of the client under the AWS shared responsibility model?

- A. Virtualization infrastructure
- B. Network infrastructure
- C. Application security
- D. Physical security of hardware

Correct Answer: C

Customers retain control of what security they choose to implement to protect their own content, platform, applications, systems and networks.

462) Which Amazon Web Services (AWS) service can be used to monitor illegal API calls?

- A. AWS Config
- B. AWS CloudTrail
- C. AWS Trusted Advisor
- D. Amazon Inspector

Correct Answer: *B*

AWS CloudTrail allows AWS customers to **record API calls, sending log files to Amazon S3 buckets for storage**. The service provides API activity data including the identity of an API caller, the time of an API call, the source of the IP address of an API caller, the request parameters and the response elements returned by the AWS service.

463) An ecommerce firm predicts a significant rise in online traffic in the run-up to two very popular shopping holidays.

Which AWS service or functionality enables dynamic resource adjustment in response to this change in demand?

- A. AWS CloudTrail
- B. Amazon EC2 Auto Scaling
- C. Amazon Forecast
- D. AWS Config

Correct Answer: *B*

Amazon EC2 Auto Scaling Use predictive scaling to increase the number of EC2 instances in your Auto Scaling group in advance of daily and weekly patterns in traffic flows.

464) Which strategy contributes to the cost optimization of consumers migrating to the AWS Cloud?

- A. Paying only for what is used
- B. Purchasing hardware before it is needed
- C. Manually provisioning cloud resources
- D. Purchasing for the maximum possible load

Correct Answer: A

With AWS you only pay for what use, helping your organization remain agile, responsive and always able to meet scale demands.

465) According to the AWS shared responsibility model, which task is the customer's responsibility?

- A. Maintaining the infrastructure needed to run AWS Lambda
- B. Updating the operating system of Amazon DynamoDB instances
- C. Maintaining Amazon S3 infrastructure
- D. Updating the guest operating system on Amazon EC2 instances

Correct Answer: D

466) Which design principle is achieved by following the reliability pillar of the AWS Well-Architected Framework?

- A. Vertical scaling
- B. Manual failure recovery
- C. Testing recovery procedures
- D. Changing infrastructure manually

Correct Answer: C

467) What enables a business to give a low-latency experience to its worldwide users?

- A. Using an AWS Region that is central to all users
- B. Using a second Availability Zone in the AWS Region that is being used
- C. Enabling caching in the AWS Region that is being used
- D. Using edge locations to put content closer to all users

Correct Answer: D

the **edge location** is physically much **closer** to the **user** than the origin server, it has lower latency.

468) A business has optimized its workload by using certain AWS services in order to increase efficiency and minimize costs.

Which cost management best practice does this case demonstrate?

- A. Resource controls
- B. Cost allocation
- C. Architecture optimization
- D. Tagging enforcement

Correct Answer: C

Architecture optimization focuses on the need to continually refine workloads to be more cost-conscious to create better architected systems

469) Which feature of cloud computing can AWS exhibit via its capacity to provide reduced variable prices as a consequence of big purchase volumes?

- A. Pay-as-you-go pricing
- B. High availability
- C. Global reach
- D. Economies of scale

Correct Answer: D

The **economies of scale** effect occurs because costs can now be spread over a larger number of customers. The infrastructure becomes cheaper, prices can be reduced and new customers benefit from the lower prices.

470) A customer with an AWS Basic Support subscription has discovered that their AWS resources are being used for unauthorized purposes.

What is the preferred mechanism for the user to notify AWS of the activity?

- A. Contact the AWS Concierge Support team.
- B. Contact an AWS technical account manager.
- C. Contact the AWS Abuse team.
- D. Contact the AWS Support team.

Correct Answer: C

If you suspect that AWS resources are used for abusive purposes, contact the AWS Abuse team using the Report Amazon AWS abuse form, or by contacting abuse@amazonaws.com. Provide all the necessary information, including logs in plaintext, email headers, and so on, when you submit your request.

471) Which AWS service should a business use to check the compliance of AWS resource settings on a continual basis?

- A. AWS Organizations
- B. AWS Config
- C. AWS Artifact
- D. AWS Service Catalog

Correct Answer: *B*

AWS Config is a service that enables you to assess, audit, and evaluate the configurations of your AWS resources. Config continuously monitors and records your AWS resource configurations and allows you to automate the evaluation of recorded configurations against desired configurations. With Config, you can review changes in configurations and relationships between AWS resources, dive into detailed resource configuration histories, and determine your overall compliance against the configurations specified in your internal guidelines. This enables you to simplify compliance auditing, security analysis, change management, and operational troubleshooting.

472) Which AWS Cloud feature relieves customers of the requirement to estimate future infrastructure consumption?

- A. Easy and fast deployment of applications in multiple Regions around the world
- B. Security of the AWS Cloud
- C. Elasticity of the AWS Cloud
- D. Lower variable costs due to massive economies of scale

Correct Answer: C

Implement elasticity

- Identify the workloads that have variable load.
- Identify if the increase in demand can be met by automatic scaling, or if it needs to be in place before (for events, launches, etc.).

473) A user needs to quickly deploy a non-relational database on AWS. The user does not want to manage the underlying hardware or the database software.

Which AWS service can be used to accomplish this?

- A. Amazon RDS
- B. Amazon DynamoDB
- C. Amazon Aurora
- D. Amazon Redshift

Correct Answer: B

Amazon DynamoDB is a fully managed, serverless, key-value NoSQL database designed to run high-performance applications at any scale. DynamoDB offers built-in security, continuous backups, automated multi-Region replication, in-memory caching, and data import and export tools.

474) Which pattern is suggested for creating an AWS highly available architecture?

- A. Ensure that components have low-latency network connectivity.
- B. Run enough Amazon EC2 instances to operate at peak load.
- C. Ensure that the application is designed to accommodate failure of any single component.
- D. Use a monolithic application that handles all operations.

Correct Answer: C

Amazon Web Services provides services and infrastructure to build reliable, fault-tolerant, and highly available systems in the cloud. Fault-tolerance defines the ability for a system to remain in operation even if some of the components used to build the system fail.

475) Which task is an AWS responsibility when a workload is running in Amazon RDS?

- A. Creating the database table
- B. Updating the database schema
- C. Installing the database engine
- D. Dropping the database records

Correct Answer: C

476) A business is contemplating migrating its on-premises data center to Amazon Web Services (AWS).

What aspects should a Total Cost of Ownership (TCO) study consider? (Select two.)

- A. Amazon EC2 instance availability
- B. Power consumption of the data center
- C. Labor costs to replace old servers
- D. Application developer time
- E. Database engine capacity

Correct Answer: BC

Total cost of ownership (TCO) is an analysis that looks at the hidden costs beyond price and places a single value on the complete life-cycle of a capital purchase. This value includes every phase of ownership: acquisition, operation, and the softer costs of change management that flows down from acquisition such as documentation and training.

477) A business currently operates an on-premises Microsoft SQL Server instance and is transferring its application to AWS. Although the firm lacks the resources necessary to modify the program, management wants to cut operating costs as part of the move.

Which database service is most capable of meeting these requirements?

- A. Amazon DynamoDB
- B. Amazon Redshift
- C. Microsoft SQL Server on Amazon EC2
- D. Amazon RDS for SQL Server

Correct Answer: D

With Amazon RDS, your database operations are managed by AWS, leaving your team free to focus on innovation. Amazon RDS handles instance failover, data backups, and software updates, so you can enjoy the efficiencies of the AWS Cloud for a fast and reliable database option.

478) A development team wants to publish and manage web services that provide REST APIs. Which AWS service will meet this requirement?

- A. AWS App Mesh
- B. Amazon API Gateway
- C. Amazon CloudFront
- D. AWS Cloud Map

Correct Answer: B

Amazon API Gateway is a fully managed service that makes it easy for developers to create, publish, maintain, monitor, and secure APIs at any scale.

479) What is an example of AWS Cloud agility?

- A. Access to multiple instance types
- B. Access to managed services
- C. Using Consolidated Billing to produce one bill
- D. Decreased acquisition time for new compute resources

Correct Answer: D

Agility is the **ability to react quickly**. In cloud, it takes a minute or two to create a Virtual Machine that is up and running

480) What are the advantages of using loose coupling as a design paradigm for cloud architectures?

- A. It facilitates low-latency request handling.
- B. It allows applications to have dependent workflows.
- C. It prevents cascading failures between different components.
- D. It allows companies to focus on their physical data center operations.

Correct Answer: C

Loose Coupling: A change or a failure in one component should not cascade to other components.

481) A business operates a website that is hosted on AWS and is protected by an Application Load Balancer. The business wishes to protect its website against SQL injection and cross-site scripting.

Which Amazon Web Services (AWS) service should the business use?

- A. Amazon GuardDuty
- B. AWS WAF
- C. AWS Trusted Advisor
- D. Amazon Inspector

Correct Answer: B

To protect your applications against SQL injection and cross-site scripting (XSS) attacks, use the built-in SQL injection and cross-site scripting engines. Remember that attacks can be performed on different parts of the HTTP request, such as the HTTP header, query string, or URI. Configure the AWS WAF rules to inspect different parts of the HTTP request against the built-in mitigation engines.

482) An online retail company wants to migrate its on-premises workload to AWS. The company needs to automatically handle a seasonal workload increase in a cost- effective manner. Which AWS Cloud features will help the company meet this requirement? (Choose two.)

- A. Cross-Region workload deployment
- B. Pay-as-you-go pricing
- C. Built-in AWS CloudTrail audit capabilities
- D. Auto Scaling policies
- E. Centralized logging

Correct Answer: BD

483) A company's recently released application is rapidly gaining popularity. To enhance customer service, the firm want to establish a phone number that would enable it to handle the growing amount of calls received by its support employees.

Which Amazon Web Services (AWS) offering should be utilized to fulfill this requirement?

- A. Amazon Connect
- B. Amazon CloudFront
- C. Amazon DirectConnect
- D. AWS Trusted Advisor

Correct Answer: A

After you create an Amazon Connect instance, you can claim a phone number to use for your contact center. You can use this phone number to place a test call in to your contact center to confirm that it is working correctly. You can also use it in your production environment.

For pricing information about claimed phone number costs, see [Amazon Connect pricing](#).

If you want to keep a phone number you already have, you can port the phone number and use it with Amazon Connect. After a phone number is ported to Amazon Connect, it appears in the list of available phone numbers for you to assign to contact flows.

484) A business want to evaluate streaming user data and reply in real time to consumer enquiries.

Which AWS service satisfies these criteria?

- A. Amazon QuickSight
- B. Amazon Redshift
- C. Amazon Kinesis Data Analytics
- D. AWS Data Pipeline

Correct Answer: C

Amazon Kinesis Data Streams is a scalable and durable real-time data streaming service that can continuously capture gigabytes of data per second from hundreds of thousands of sources.

485) Which of the following is an example of a frequent IT duty that AWS can do in order to free up firm IT resources? (Select two.)

- A. Patching databases software
- B. Testing application releases
- C. Backing up databases
- D. Creating database schema
- E. Running penetration tests

Correct Answer: AC

Patch Manager, a capability of **AWS Systems Manager**, automates the process of **patching** managed nodes with both security related and other types of updates.

AWS Backup automates and consolidates **backup** tasks previously performed **service-by-service**, removing the need to create custom scripts and manual processes.

486) Which AWS service helps developers use loose coupling and reliable messaging between microservices?

- A. Elastic Load Balancing
- B. Amazon Simple Notification Service (Amazon SNS)
- C. Amazon CloudFront
- D. Amazon Simple Queue Service (Amazon SQS)

Correct Answer: D

Amazon Simple Queue Service (SQS) is a **managed message queuing service** technical professionals and developers use to send, store and retrieve multiple messages of various sizes asynchronously.

487) How should a web application be deployed in the AWS Cloud to guarantee high availability?

- 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.

Correct Answer: A

This is to achieve **High Availability** for any web application deployed in AWS. The following features will be present:

- High availability across multiple instances/multiple availability zones.
- Auto Scaling of instances (scale up and scale down) based on the number of requests coming in
- Additional **Security** to the instances/database that is in production
- No impact to end-users during the newer version of code deployment
- No Impact during patching the instances

488) A company needs to implement identity management for a fleet of mobile apps that are running in the AWS Cloud.

Which AWS service will meet this requirement?

- A. Amazon Cognito
- B. AWS Security Hub
- C. AWS Shield
- D. AWS WAF

Correct Answer: A

Amazon Cognito lets you add user sign-up, sign-in, and access control to your web and mobile apps quickly and easily.

489) Which AWS service or feature enables a business to track, monitor, and control its AWS expenses and consumption over time?

- A. AWS Budgets
- B. AWS Cost Explorer
- C. AWS Organizations
- D. Consolidated billing

Correct Answer: B

AWS Cost Explorer has an easy-to-use interface that lets you visualize, understand, and manage your AWS costs and usage over time.

490) A huge corporation has recruited a developer who requires AWS credentials.

Which security best practices should be adhered to? (Select two.)

- A. Grant the developer access to only the AWS resources needed to perform the job.
- B. Share the AWS account root user credentials with the developer.
- C. Add the developer to the administrator's group in AWS IAM.
- D. Configure a password policy that ensures the developer's password cannot be changed.
- E. Ensure the account password policy requires a minimum length.

Correct Answer: AE

491) A business has a 500 TB image repository that has to be moved to Amazon Web Services (AWS) for processing.

Which AWS service is the most cost-effective way to import this data?

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

Correct Answer: A

Snowball is a petabyte-scale data transport solution that uses secure appliances to transfer large amounts of data into and out of the AWS cloud. Using Snowball addresses common challenges with large-scale data transfers including high network costs, long transfer times, and security concerns

492) What is an AWS Cloud best practice in terms of design?

- A. Tight coupling of components
- B. Single point of failure
- C. High availability
- D. Overprovisioning of resources

Correct Answer: C

493) A workload hosted on AWS will continue to operate indefinitely by using a steady number of Amazon EC2 instances.

Which pricing strategy will decrease costs while assuring the availability of computational resources?

- A. Dedicated Hosts
- B. On-Demand Instances
- C. Spot Instances
- D. Reserved Instances

Correct Answer: D

Reserved Instances provide you with significant savings on your Amazon EC2 costs compared to On-Demand Instance pricing. Reserved Instances are not physical instances, but rather a billing discount applied to the use of On-Demand Instances in your account.

494) A company needs an Amazon EC2 instance for a rightsized database server that must run constantly for 1 year.

Which EC2 instance purchasing option will meet these requirements MOST cost-effectively?

- A. Standard Reserved Instance
- B. Convertible Reserved Instance
- C. On-Demand Instance
- D. Spot Instance

Correct Answer: A

Standard Reserved Instances typically provide the highest discount levels. One-year Standard Reserved Instances provide a similar discount to three-year Convertible Reserved Instances.

495) A company has multiple applications and is now building a new multi-tier application. The company will host the new application on Amazon EC2 instances. The company wants the network routing and traffic between the various applications to follow the security principle of least privilege.

Which AWS service or feature should the company use to enforce this principle?

- A. Security groups
- B. AWS Shield
- C. AWS Global Accelerator
- D. AWS Direct Connect gateway

Correct Answer: A

Security groups control the traffic that is allowed to reach and leave the resources that it is associated with.

496) A business is developing an application that will need the capacity to transmit, save, and receive messages across its components.

Additionally, the corporation requires that communications be processed in first-in, first-out (FIFO) sequence.

Which Amazon Web Services (AWS) service should the business use?

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

Correct Answer: D

FIFO queues are available in all AWS regions where Amazon SQS is available.

497) A business requires 24/7 phone, email, and chat support, with a response time of less than one hour in the event of a service outage to a production system.

Which AWS Support plan best matches these needs for the least amount of money?

- A. Basic
- B. Developer
- C. Business
- D. Enterprise

Correct Answer: C

498) A customer is considering migrating an application burden to the Amazon Web Services (AWS) Cloud.

Which control becomes AWS's responsibility after the migration?

- A. Patching the guest operating system
- B. Maintaining physical and environmental controls
- C. Protecting communications and maintaining zone security
- D. Patching specific applications

Correct Answer: B

499) What is the function of a VPC's internet gateway?

- A. To create a VPN connection to the VPC
- B. To allow communication between the VPC and the Internet
- C. To impose bandwidth constraints on internet traffic
- D. To load balance traffic from the Internet across Amazon EC2 instances

Correct Answer: B

An internet gateway is a horizontally scaled, redundant, and highly available VPC component that allows communication between your VPC and the internet.

500) Which AWS IAM feature enables developers to use the AWS CLI to access AWS services?

- A. API keys
- B. Access keys
- C. User names/Passwords
- D. SSH keys

Correct Answer: B

Access keys are long-term credentials for an IAM user or the AWS account root user. You can use access keys to sign programmatic requests to the AWS CLI or AWS API (directly or using the AWS SDK).

501) A company's web application requires AWS credentials and authorizations to use an AWS service. Which IAM entity should the company use as best practice?

- A. IAM role
- B. IAM user
- C. IAM group
- D. IAM multi-factor authentication (MFA)

Correct Answer: A

502) Which AWS service or feature gives a company the ability to control incoming traffic and outgoing traffic for Amazon EC2 instances?

- A. Security groups
- B. Amazon Route 53
- C. AWS Direct Connect
- D. Amazon VPC

Correct Answer: A

A security group acts as a virtual firewall for your EC2 instances to control incoming and outgoing traffic. Inbound rules control the incoming traffic to your instance, and outbound rules control the outgoing traffic from your instance. When you launch an instance, you can specify one or more security groups.

503) On AWS, a corporation is constructing a new archiving system capable of storing terabytes of data. The firm will NOT often retrieve the data.

Which Amazon S3 storage type will result in the LOWEST SYSTEM COST?

- A. S3 Standard-Infrequent Access (S3 Standard-IA)
- B. S3 Glacier
- C. S3 Intelligent-Tiering
- D. S3 One Zone-Infrequent Access (S3 One Zone-IA)

Amazon S3 Glacier (S3 Glacier) S3 Glacier is a secure, durable, and low-cost storage class for data archiving. You can reliably store any amount of data at costs that are competitive with or cheaper than on-premises solutions.

504) Which AWS Support package includes access to architectural and operational assessments, as well as 24/7 email, online chat, and phone support from Senior Cloud Support Engineers?

- A. Basic
- B. Business
- C. Developer
- D. Enterprise

Correct Answer: D

With Enterprise Support, you get 24x7 technical support from high-quality engineers, tools and technology to automatically manage health of your environment, consultative architectural guidance delivered in the context of your applications and use-cases, and a designated Technical Account Manager (TAM) to coordinate access to proactive / preventative programs and AWS subject matter experts. AWS Enterprise Support is recommended if you have business and/or mission critical workloads in AWS.

505) Which of the following describes the root user of an AWS account?

- A. The root user is the only user that can be configured with multi-factor authentication (MFA).
- B. The root user is the only user that can access the AWS Management Console.
- C. The root user is the first sign-in identity that is available when an AWS account is created.
- D. The root user has a password that cannot be changed.

Correct Answer: C

AWS account root user

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When you first create an Amazon Web Services (AWS) account, you begin with one identity that has complete access to all AWS services and resources in the account. This identity is called the AWS account *root user*. You can sign in as the root user using the email address and password that you used to create the account.

506) The AWS IAM recommended practice for providing the fewest possible privileges is as follows:

- A. apply an IAM policy to an IAM group and limit the size of the group.
- B. require multi-factor authentication (MFA) for all IAM users.
- C. require each IAM user who has different permissions to have multiple passwords.
- D. apply an IAM policy only to IAM users who require it.

Correct Answer: D

By creating an AWS **IAM policy**, IT admins can ensure that members of a project will only have access to the exact resources they'll need to complete the project. They can do this by creating a **policy** that enables access to a particular resource for a specific date range and **applying the policy** to each **IAM** identity (**users**, roles, or groups).

507) To prevent fraudulent compute activity, a user need a simple method to detect whether any Amazon EC2 instances have unlimited access to their ports.

Which Amazon Web Services (AWS) offering will meet this requirement?

- A. VPC Flow Logs
- B. AWS WAF
- C. AWS CloudTrail
- D. AWS Trusted Advisor

Correct Answer: D

AWS Trusted Advisor Checks security groups for rules that allow unrestricted access (0.0.0.0/0) to specific ports.

Unrestricted access increases opportunities for malicious activity (hacking, denial-of-service attacks, loss of data). The ports with highest risk are flagged red, and those with less risk are flagged yellow. Ports flagged green are typically used by applications that require unrestricted access, such as HTTP and SMTP.

508) Which AWS service is a content delivery network that safely and quickly distributes data, video, and apps to consumers worldwide?

- A. AWS CloudFormation
- B. AWS Direct Connect
- C. Amazon CloudFront
- D. Amazon Pinpoint

Correct Answer: C

Amazon CloudFront is a fast content delivery network (CDN) service that securely delivers data, videos, applications, and APIs to customers globally with low latency, high transfer speeds, all within a developer-friendly environment. CloudFront is integrated with AWS (both physical locations that are directly connected to the AWS global infrastructure, as well as other AWS services).

509) A company is starting to build its infrastructure in the AWS Cloud. The company wants access to technical support during business hours. The company also wants general architectural guidance as teams build and test new applications.

Which AWS Support plan will meet these requirements at the LOWEST cost?

- A. AWS Basic Support
- B. AWS Developer Support
- C. AWS Business Support
- D. AWS Enterprise Support

Correct Answer: B

510) A company is migrating its public website to AWS. The company wants to host the domain name for the website on AWS.

Which AWS service should the company use to meet this requirement?

- A. AWS Lambda
- B. Amazon Route 53
- C. Amazon CloudFront
- D. AWS Direct Connect

Correct Answer: B

511) A company needs to evaluate its AWS environment and provide best practice recommendations in five categories: cost, performance, service limits, fault tolerance, and security.
Which AWS service can the company use to meet these requirements?

- A. AWS Shield
- B. AWS WAF
- C. AWS Trusted Advisor
- D. AWS Service Catalog

Correct Answer: C

AWS Trusted Advisor is used to evaluate its AWS environment and provide best practice recommendations in five categories: cost, performance, service limits, fault tolerance, and security.

512) Which AWS feature is exemplified by on-demand technology services that allow businesses to substitute variable expenditures for upfront fixed expenses?

- A. High availability
- B. Economies of scale
- C. Pay-as-you-go pricing
- D. Global reach

Correct Answer: C

•Trade fixed expense for variable expense – Instead of having to invest heavily in data centers and servers before you know how you're going to use them, you can pay only when you consume computing resources, and pay only for how much you consume.

513) A business is relocating and need an encrypted connection to AWS.

Which AWS service will assist you in fulfilling this requirement?

- A. AWS VPN
- B. Amazon Route 53
- C. Amazon API Gateway
- D. Amazon Connect

Correct Answer: A

AWS VPN -- You can now use additional encryption, integrity, and key exchange algorithms for your VPN connections. These advanced algorithms provide higher security to protect your data, higher performance for faster transfer rates, and help meet compliance requirements.

514) What technology permits compute capacity to alter in response to changing load conditions?

- A. Load balancing
- B. Automatic failover
- C. Round robin
- D. Auto Scaling

Correct Answer: D

AWS Auto Scaling monitors your applications and automatically adjusts capacity to maintain steady, predictable performance at the lowest possible cost. Using

AWS Auto Scaling, it's easy to setup application scaling for multiple resources across multiple services in minutes. The service provides a simple, powerful user interface that lets you build scaling plans for resources including Amazon EC2 instances and Spot Fleets, Amazon ECS tasks, Amazon DynamoDB tables and indexes, and Amazon Aurora Replicas. AWS Auto Scaling makes scaling simple with recommendations that allow you to optimize performance, costs, or balance between them. If you're already using Amazon EC2 Auto Scaling to dynamically scale your Amazon EC2 instances, you can now combine it with AWS Auto

Scaling to scale additional resources for other AWS services. With AWS Auto Scaling, your applications always have the right resources at the right time.

515) Which AWS service provides the capability to view end-to-end performance metrics and troubleshoot distributed applications?

- A. AWS Cloud9
- B. AWS CodeStar
- C. AWS Cloud Map
- D. AWS X-Ray

Correct Answer: D

AWS X-Ray makes it easy for developers to analyze the behavior of their production, distributed applications with end-to-end tracing capabilities. You can use X-Ray to identify performance bottlenecks, edge case errors, and other hard to detect issues. X-Ray supports applications, either in development or in production, of any type or size, from simple asynchronous event calls and three-tier web applications to complex distributed applications built using a microservices architecture. This enables developers to quickly find and address problems in their applications and improve the experience for end users of their applications.



516) A major corporation has a workload that demands on-premises hardware. The organization want to continue using the same management and control plane services as it does on AWS.

Which Amazon Web Services (AWS) offering should the business employ to achieve these requirements?

- A. AWS Device Farm
- B. AWS Fargate
- C. AWS Outposts
- D. AWS Ground Station

Correct Answer: C

AWS Outposts is a family of fully managed solutions delivering AWS infrastructure and services to virtually any on-premises or edge location for a truly consistent hybrid experience. Outposts solutions allow you to extend and run native AWS services on premises, and is available in a variety of form factors, from 1U and 2U Outposts servers to 42U Outposts racks, and multiple rack deployments.

With AWS Outposts, you can run some AWS services locally and connect to a broad range of services available in the local AWS Region. Run applications and workloads on premises using familiar AWS services, tools, and APIs. Outposts supports workloads and devices requiring low latency access to on-premises systems, local data processing, data residency, and application migration with local system interdependencies.

517) A business operates an ecommerce application that is hosted in Europe. To reduce latency for international customers accessing the website, the firm would want to cache frequently viewed static information closer to the consumers.

Which Amazon Web Services (AWS) offering will meet these requirements?

- A. Amazon ElastiCache
- B. Amazon CloudFront
- C. Amazon Elastic File System (Amazon EFS)
- D. Amazon Elastic Block Store (Amazon EBS)

Correct Answer: B

Amazon CloudFront employs a global network of edge locations and regional edge caches that cache copies of your content close to your viewers. Amazon

CloudFront ensures that end-user requests are served by the closest edge location. As a result, viewer requests travel a short distance, improving performance for your viewers. For files not cached at the edge locations and the regional edge caches, Amazon CloudFront keeps persistent connections with your origin servers so that those files can be fetched from the origin servers as quickly as possible.

518) Which of the following is not a recommended approach for IAM user management? (Select two.)

- A. Require IAM users to change their passwords after a specified period of time
- B. Prevent IAM users from reusing previous passwords
- C. Recommend that the same password be used on AWS and other sites
- D. Require IAM users to store their passwords in raw text
- E. Disable multi-factor authentication (MFA) for IAM users

Correct Answer: DE

519) Which Amazon Web Services feature assists in identifying harmful or illegal activity in AWS accounts and workloads?

- A. Amazon Rekognition
- B. AWS Trusted Advisor
- C. Amazon GuardDuty
- D. Amazon CloudWatch

Correct Answer: C

Amazon GuardDuty is a continuous security monitoring service that analyzes and processes the following data sources: AWS CloudTrail management event logs, AWS CloudTrail data events for S3, DNS logs, EKS audit logs, and VPC flow logs. It uses threat intelligence feeds, such as lists of malicious IP addresses and domains, and machine learning to identify unexpected and potentially unauthorized and malicious activity within your AWS environment.

520) Which AWS service or functionality provides technical support to users who subscribe to the AWS Basic Support plan?

- A. AWS senior support engineers
- B. AWS technical account manager (TAM)
- C. AWS Trusted Advisor
- D. AWS Discussion Forums

Correct Answer: C

Basic Support is included for all AWS customers and includes:

- Customer Service and Communities - 24x7 access to customer service, [documentation](#), [whitepapers](#), and [AWS re:Post](#).
- [AWS Trusted Advisor](#) - Access to core Trusted Advisor [checks](#) and guidance to provision your resources following best practices to increase performance and improve security.
- [AWS Personal Health Dashboard](#) - A personalized view of the health of AWS services, and alerts when your resources are impacted.

521) Which AWS service provides threat detection by monitoring for malicious activities and unauthorized actions to protect AWS accounts, workloads, and data that is stored in Amazon S3?

- A. AWS Shield
- B. AWS Firewall Manager
- C. Amazon GuardDuty
- D. Amazon Inspector

Correct Answer: C

Amazon GuardDuty is a threat detection service that continuously monitors your AWS accounts and workloads for malicious activity and delivers detailed security findings for visibility and remediation.

522) Which AWS service enables you to get AWS security and compliance information on-demand?

- A. AWS CloudTrail
- B. AWS Artifact
- C. AWS Health
- D. Amazon CloudWatch

Correct Answer: B

AWS Artifact is your go-to, central resource for compliance-related information that matters to you. It provides on-demand access to AWS' security and compliance reports and select online agreements. Reports available in AWS Artifact include our Service Organization Control (SOC) reports, Payment Card

Industry (PCI) reports, and certifications from accreditation bodies across geographies and compliance verticals that validate the implementation and operating effectiveness of AWS security controls. Agreements available in AWS Artifact include the Business Associate Addendum (BAA) and the Nondisclosure Agreement (NDA).

523) Which Amazon Web Services (AWS) service makes use of edge locations?

- A. Amazon Aurora
- B. AWS Global Accelerator
- C. Amazon Connect
- D. AWS Outposts

Correct Answer: *B*

AWS Global Accelerator and **Amazon CloudFront** are separate services that use the AWS global network and its edge locations around the world.

524) Which of the following AWS capabilities allows a user to deploy an Amazon Elastic Compute Cloud (Amazon EC2) instance that has already been configured?

- A. Amazon Elastic Block Store (Amazon EBS)
- B. Amazon Machine Image
- C. Amazon EC2 Systems Manager
- D. Amazon AppStream 2.0

Correct Answer: B

To use Amazon EC2, you simply:

- ☞ Select a pre-configured, templated Amazon Machine Image (AMI) to get up and running immediately. Or create an AMI containing your applications, libraries, data, and associated configuration settings.
- ☞ Configure security and network access on your Amazon EC2 instance.
- ☞ Choose which instance type(s) you want, then start, terminate, and monitor as many instances of your AMI as needed, using the web service APIs or the variety of management tools provided.
- ☞ Determine whether you want to run in multiple locations, utilize static IP endpoints, or attach persistent block storage to your instances.
- ☞ Pay only for the resources that you actually consume, like instance-hours or data transfer.

525) Which AWS service can a company use to store and manage Docker images?

- A. Amazon DynamoDB
- B. Amazon Kinesis Data Streams
- C. Amazon Elastic Container Registry (Amazon ECR)
- D. Amazon Elastic File System (Amazon EFS)

Correct Answer: C

Amazon Elastic Container Registry (ECR) is a highly available and secure private container repository that makes it easy to store and manage your Docker container images, encrypting and compressing images at rest so they are fast to pull and secure.

526) A business wishes to send its traffic directly and confidentially to a virtual private cloud (VPC) rather than through the public internet.
Which mode of connection enables this capability?

- A. AWS VPN
- B. AWS Direct Connect
- C. VPC NAT gateway
- D. VPC internet gateway

Correct Answer: *B*

Direct Connect can be used to establish a private virtual interface from your on-premises **directly to AWS VPC**. It can provide you private, high bandwidth network connection between your network and **VPC**. With the help of multiple virtual interfaces, you can establish private connectivity to multiple **VPCs**

527) What can be utilized to automate and manage AWS setups that are safe, well-architected, and multi-account?

- A. AWS shared responsibility model
- B. AWS Control Tower
- C. AWS Security Hub
- D. AWS Well-Architected Tool

Correct Answer: B

Control Tower automates the process of setting up a new baseline multi-account AWS environment that is secure, well-architected, and ready to use. Control Tower incorporates the knowledge that AWS Professional Service has gained over the course of thousands of successful customer engagements.

528) A company needs an automated security assessment report that will identify unintended network access to Amazon EC2 instances. The report also must identify operating system vulnerabilities on those instances. Which AWS service or feature should the company use to meet this requirement?

- A. AWS Trusted Advisor
- B. Security groups
- C. Amazon Macie
- D. Amazon Inspector

Correct Answer: D

Amazon Inspector is an automated vulnerability management service that continually scans AWS workloads for software vulnerabilities and unintended network exposure.

529) Which AWS Support plan is the LEAST EXPENSIVE that provides for a one-hour goal response time for support cases?

- A. Enterprise
- B. Business
- C. Developer
- D. Basic

Correct Answer: B

We recommend AWS Business Support if you have production workloads on AWS and want 24x7 access to technical support and architectural guidance in the context of your specific use-cases. In addition to enhanced technical support and architectural guidance, Business Support provides access to third-party software support, documentation and forums, AWS Trusted Advisor, AWS Personal Health Dashboard, AWS Support API, and launch and event planning.

General guidance: < 24 hours

System impaired: < 12 hours

Production system impaired: < 4 hours

Production system down: < 1 hour



530) Which AWS hybrid storage offering allows users to effortlessly integrate on-premises applications with AWS Cloud storage?

- A. AWS Backup
- B. Amazon Connect
- C. AWS Direct Connect
- D. AWS Storage Gateway

Correct Answer: D

AWS Storage Gateway is a set of hybrid cloud storage services that provide on-premises access to virtually unlimited cloud storage.

531) A user needs to prepare a report that summarizes the status of AWS account's major security checks. The report must contain the following:

- Permissions on Amazon S3 buckets are now inactive.
- Whether or not multi-factor authentication is enabled for the root user of the AWS account.
- If any security groups are set to enable unlimited access, this will be shown.

Where can I get all of this information in one place?

- A. Amazon QuickSight dashboard
- B. AWS CloudTrail trails
- C. AWS Trusted Advisor report
- D. IAM credential report

Correct Answer: C

532) A pharmaceutical company's infrastructure is managed in a single AWS Region. The organization want to link hundreds of VPCs across many AWS accounts.

Which AWS service or feature should the business use to streamline administration and save operating costs?

- A. VPC endpoint
- B. AWS Direct Connect
- C. AWS Transit Gateway
- D. VPC peering

Correct Answer: C

AWS Transit Gateway connects VPCs and on-premises networks through a central hub. This simplifies your network and puts an end to complex peering relationships. It acts as a cloud router – each new connection is only made once.

533) A global company is building a simple time-tracking mobile app. The app needs to operate globally and must store collected data in a database. Data must be accessible from the AWS Region that is closest to the user. What should the company do to meet these data storage requirements with the LEAST amount of operational overhead?

- A. Use Amazon EC2 in multiple Regions to host separate databases
- B. Use Amazon RDS cross-Region replication
- C. Use Amazon DynamoDB global tables Local Replicas
- D. Use AWS Database Migration Service (AWS DMS)

Correct Answer: C

Global tables build on the global Amazon DynamoDB footprint to provide you with a fully managed, multi-Region, and multi-active database that delivers fast, local, read and write performance for massively scaled, global applications. Global tables replicate your DynamoDB tables automatically across your choice of AWS Regions.

534) One advantage of Amazon Elastic Compute Cloud (Amazon EC2) on-demand pricing is the following:

- A. the ability to bid for a lower hourly cost.
- B. paying a daily rate regardless of time used.
- C. paying only for time used.
- D. pre-paying for instances and paying a lower hourly rate.

Correct Answer: C

On-Demand Capacity Reservations are priced exactly the same as their equivalent (On-Demand) instance usage. If a Capacity Reservation is fully utilized, you only pay for instance usage and nothing towards the Capacity Reservation. If a Capacity Reservation is partially utilized, you pay for the instance usage and for the unused portion of the Capacity Reservation.

535) Which task is a customer's responsibility, according to the AWS shared responsibility model?

- A. Management of the guest operating systems
- B. Maintenance of the configuration of infrastructure devices
- C. Management of the host operating systems and virtualization
- D. Maintenance of the software that powers Availability Zones

Correct Answer: A

536) Which AWS service enables you to swiftly conduct one-time queries on Amazon S3 data?

- A. Amazon EMR
- B. Amazon DynamoDB
- C. Amazon Redshift
- D. Amazon Athena

Amazon Athena is an interactive query service that makes it easy to analyze data in Amazon S3 using standard SQL. Athena is serverless, so there is no infrastructure to manage, and you pay only for the queries that you run.

537) A company needs to deliver new website features quickly in an iterative manner to minimize the time to market. Which AWS Cloud concept does this requirement represent?

- A. Reliability
- B. Elasticity
- C. Agility
- D. High availability

Correct Answer: C

538) Which VPC component adds an additional layer of protection to the subnet?

- A. Security groups
- B. Network ACLs
- C. NAT gateways
- D. Route tables

Correct Answer: *B*

Access Control Lists “**ACLs**” are network traffic filters that can control incoming or outgoing traffic. **ACLs** work on a set of rules that define how to forward or block a packet at the router’s interface. An **ACL** is the same as a Stateless Firewall, which only restricts, blocks, or allows the packets that are flowing from source to destination.

539) A company wants to increase its ability to recover its infrastructure in the case of a natural disaster. Which pillar of the AWS Well-Architected Framework does this ability represent?

- A. Cost optimization
- B. Performance efficiency
- C. Reliability
- D. Security

Correct Answer: C

The ability of a system to recover from infrastructure or service disruptions, dynamically acquire computing resources to meet demand, and mitigate disruptions such as misconfigurations or transient network issues.

540) Which AWS Support package is the LEAST EXPENSIVE that includes a dedicated AWS technical account manager (TAM)?

- A. AWS Developer Support
- B. AWS Enterprise Support
- C. AWS Basic Support
- D. AWS Business Support

Correct Answer: *B*

541) Which tool is suitable for monitoring Amazon Web Services service limits?

- A. AWS Total Cost of Ownership (TCO) Calculator
- B. AWS Trusted Advisor
- C. AWS Personal Health Dashboard
- D. AWS Cost and Usage report

Correct Answer: B

Trusted Adviser analyse your AWS account and provides recommendation:

- 1) Cost Optimization
- 2) Performance
- 3) Security
- 4) Fault Tolerance
- 5) Service Limits

542) Which AWS service or functionality involves the implementation of an internet service provider (ISP) and a colocation facility?

- A. AWS VPN
- B. Amazon Connect
- C. AWS Direct Connect
- D. Internet gateway

Correct Answer: C

543) Which AWS service tracks API calls and user activity?

- A. AWS Organizations
- B. AWS Config
- C. Amazon CloudWatch
- D. AWS CloudTrail

Correct Answer: D

AWS CloudTrail enables auditing, security monitoring, and operational troubleshooting by tracking user activity and API usage. CloudTrail logs, continuously monitors, and retains account activity related to actions across your AWS infrastructure, giving you control over storage, analysis, and remediation actions.

544) Which cloud architectural design concepts are advised for re-architecting a huge monolithic application? (Select two.)

- A. Use manual monitoring.
- B. Use fixed servers.
- C. Implement loose coupling.
- D. Rely on individual components.
- E. Design for scalability.

Correct Answer: CE

Rearchitecting applications involves sweeping change where an old monolithic application is completely revamped according to modern microservices architecture. Using individual components to re-architect a big application is one part of the process. The most important part is to design the application for scalability because the level of investment for a monolithic application can only be justified when resilience and scalability is needed.

545) Which Reserved Instance (RI) provides the HIGHEST average cost savings compared to an On-Demand Instance?

- A. 1-year, No Upfront, Standard RI
- B. 1-year, All Upfront, Convertible RI
- C. 3-year, All Upfront, Standard RI **Most Voted**
- D. 3-year, No Upfront, Convertible RI

Correct Answer: C

When it comes to Reserved Instances (RIs), the longer the term and the more upfront payment made, the higher the average cost savings compared to an On-Demand Instance. 3-year, All Upfront, Standard RI provides the highest average cost savings compared to an On-Demand Instance. This option allows you to commit to a 3-year term, pay for the entire term upfront and receive the highest level of savings. This option is ideal for predictable workloads that can be planned and managed for a longer period of time.

546) A business must monitor its AWS accounts and determine when an API request is performed against its AWS resources.

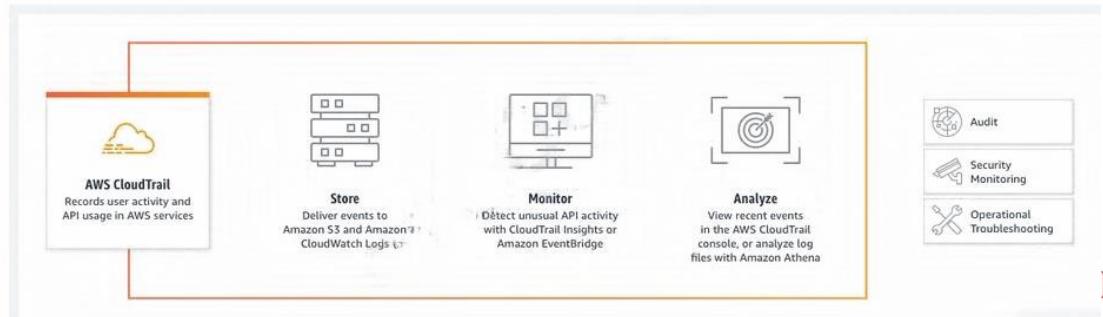
Which AWS product or service is most appropriate for meeting these requirements?

- A. Amazon CloudWatch
- B. Amazon Inspector
- C. AWS Cloud Trail
- D. AWS IAM

Correct Answer: C

How it works

AWS CloudTrail monitors and records account activity across your AWS infrastructure; giving you control over storage, analysis, and remediation actions.



Pixel

547) Which AWS service, feature, or tool uses machine learning to continuously monitor cost and usage for unusual cloud spending?

- A. Amazon Lookout for Metrics
- B. AWS Budgets
- C. Amazon CloudWatch
- D. AWS Cost Anomaly Detection

Correct Answer: D

AWS Cost Anomaly Detection sends you a notification when the difference between your actual spend and normal spend pattern exceeded the Threshold. For example, suppose that your normal spend pattern is \$100 and you set a \$10 threshold. Then, alert recipients get anomaly notifications when the cost exceeds \$110.

548) Which AWS Cloud feature will enable a multinational corporation to meet its demand for low latency to all of its customers?

- A. Fault tolerance
- B. Global reach
- C. Pay-as-you-go pricing
- D. High availability

Correct Answer: *B*

549) A business currently operates in one AWS Region and is extending operations to a second. In the second Region, the organization is utilizing the identical AWS CloudFormation template as in the original Region. When the organization seeks to deploy Amazon EC2 On-Demand Instances in the second Region, it encounters errors.

What might possibly be the source of these error messages?

- A. A new EC2 key pair has not been created for the EC2 instances.
- B. The requested EC2 instance types are not available in the second Region.
- C. The company cannot operate in a second Region until it updates its AWS contract.
- D. The company has not configured AWS Budgets to monitor the budget for the EC2 instances.

Correct Answer: A

The key pair <key pair associated with your EC2 instance> does not exist. Launching EC2 instance failed.

550) Which principles are used while architecting apps for AWS Cloud reliability? (Select two.)

- A. Design for automated failure recovery
- B. Use multiple Availability Zones
- C. Manage changes via documented processes
- D. Test for moderate demand to ensure reliability
- E. Backup recovery to an on-premises environment

Correct Answer: AB

3. Reliability

The Reliability pillar encompasses the ability of a workload to perform its intended function correctly and consistently when it's expected to. This includes the ability to operate and test the workload through its total lifecycle. You can find prescriptive guidance on implementation in the [Reliability Pillar whitepaper](#).

Design Principles

There are five design principles for reliability in the cloud:

- Automatically recover from failure
- Test recovery procedures
- Scale horizontally to increase aggregate workload availability
- Stop guessing capacity
- Manage change in automation

551) A company wants to migrate to AWS and use the same security software it uses on premises. The security software vendor offers its security software as a service on AWS.

Where can the company purchase the security solution?

- A. AWS Partner Solutions Finder
- B. AWS Support Center
- C. AWS Management Console
- D. AWS Marketplace

Correct Answer: D

AWS Marketplace **provides a new sales channel for ISVs and Consulting Partners to sell their solutions to AWS customers.** We make it easy for customers to find, buy, deploy and manage software solutions, including SaaS, in a matter of minutes.

552) AWS is responsible for which of the following security-related elements of hosting an Amazon Elastic Compute Cloud (Amazon EC2) instance?

- A. Security of private keys
- B. Hypervisor software updates
- C. Security updates to software running on the instance
- D. Policies controlling instance access

Correct Answer: B

553) Which of the following statements most accurately characterizes Elastic Load Balancing?

- A. It translates a domain name into an IP address using DNS.
- B. It distributes incoming application traffic across one or more Amazon EC2 instances.
- C. It collects metrics on connected Amazon EC2 instances.
- D. It automatically adjusts the number of Amazon EC2 instances to support incoming traffic.

Correct Answer: B

Elastic Load Balancing (ELB) automatically distributes incoming application traffic across multiple targets and virtual appliances in one or more Availability Zones (AZs).

554) Which feature of the AWS Cloud enables customers to reduce idle CPU capacity?

- A. Agility
- B. Elasticity
- C. Reliability
- D. Durability

Correct Answer: B

Cloud elasticity is the ability to gain or **reduce computing** resources such as **CPU/processing**, RAM, input/output bandwidth, and storage capacities on demand without causing system performance disruptions. This is often an automatic process in cloud computing.

555) Which of the following is a managed AWS service that is used specifically for extract, transform, and load (ETL) data?

- A. Amazon Athena
- B. AWS Glue
- C. Amazon S3
- D. AWS Snowball Edge

Correct Answer: B

AWS Glue is another offering from AWS and is a serverless ETL (Extract, Transform, and Load) service on the cloud. It is fully managed, cost-effective service to categorize your data, clean and enrich it and finally move it from source systems to target systems.

556) A corporation is developing a mobile application to give its clients with shopping suggestions. The business intends to include a graph database into the shopping recommendation engine.

Which Amazon Web Services database service should the business use?

- A. Amazon DynamoDB
- B. Amazon Aurora
- C. Amazon Neptune
- D. Amazon DocumentDB (with MongoDB compatibility)

Correct Answer: C

Amazon Neptune is a fast, reliable, fully managed graph database service that makes it easy to build and run applications.

557) Which of the following actions are controlled with AWS Identity and Access Management (IAM)?
(Choose two.)

- A. Control access to AWS service APIs and to other specific resources.
- B. Provide intelligent threat detection and continuous monitoring.
- C. Protect the AWS environment using multi-factor authentication (MFA).
- D. Grant users access to AWS data centers.
- E. Provide firewall protection for applications from common web attacks.

Correct Answer: AC

AWS multi-factor authentication (MFA) is an AWS Identity and Access Management (IAM) best practice that requires a second authentication factor in addition to user name and password sign-in credentials. You can enable MFA at the AWS account level and for root and IAM users you have created in your account.

558) A business wishes to establish a dedicated link between its on-premises IT infrastructure and AWS Region resources. Additionally, the organization wishes to decrease network latency and congestion.

Which Amazon Web Services (AWS) service or functionality should the business select?

- A. AWS VPN
- B. AWS PrivateLink
- C. Amazon Connect
- D. AWS Direct Connect

Correct Answer: D

How it works

The AWS Direct Connect cloud service is the shortest path to your AWS resources. While in transit, your network traffic remains on the AWS global network and never touches the public internet. This reduces the chance of hitting bottlenecks or unexpected increases in latency. When creating a new connection, you can choose a hosted connection provided by an AWS Direct Connect Delivery Partner, or choose a dedicated connection from AWS—and deploy at over 100 AWS Direct Connect Locations around the globe. With AWS Direct Connect SiteLink, you can send data between AWS Direct Connect locations to create private network connections between the offices and data centers in your global network.

559) Which AWS service allows clients to audit and monitor AWS resource changes?

- A. AWS Trusted Advisor
- B. Amazon GuardDuty
- C. Amazon Inspector
- D. AWS Config

Correct Answer: D

AWS Config is a service that enables you to assess, audit, and evaluate the configurations of your AWS resources. Config continuously monitors and records your AWS resource configurations and allows you to automate the evaluation of recorded configurations against desired configurations. With Config, you can review changes in configurations and relationships between AWS resources, dive into detailed resource configuration histories, and determine your overall compliance against the configurations specified in your internal guidelines. This enables you to simplify compliance auditing, security analysis, change management, and operational troubleshooting.

560) Which of the following is an advantage of using AWS's cloud computing platform?

- A. Permissive security removes the administrative burden.
- B. Ability to focus on revenue-generating activities.
- C. Control over cloud network hardware.
- D. Choice of specific cloud hardware vendors.

Correct Answer: *B*

Developer and IT staff productivity accounted for nearly 30% of overall financial benefits. The remaining benefits were driven by the flexibility and agility of Amazon cloud infrastructure services, which make it easier to trial new business models, support revenue-generating applications, and provide more reliable services to end users.

561) Which of the following are shared controls that apply to both AWS and the customer, according to the AWS shared responsibility model? (Choose two.)

- A. Resource configuration management
- B. Network data integrity
- C. Employee awareness and training
- D. Physical and environmental security
- E. Replacement and disposal of disk drives

Correct Answer: AC

Shared Controls – Controls which apply to both the infrastructure layer and customer layers, but in completely separate contexts or perspectives. In a shared control, AWS provides the requirements for the infrastructure and the customer must provide their own control implementation within their use of AWS services. Examples include:

1. Patch Management – AWS is responsible for patching and fixing flaws within the infrastructure, but customers are responsible for patching their guest OS and applications.
2. Configuration Management – AWS maintains the configuration of its infrastructure devices, but a customer is responsible for configuring their own guest operating systems, databases, and applications.
3. Awareness & Training - AWS trains AWS employees, but a customer must train their own employees.

562) Which AWS service or feature gives information about planned events that are now occurring or may occur in the near future and may impact an AWS account?

- A. AWS Config
- B. AWS Systems Manager
- C. AWS Personal Health Dashboard
- D. AWS Trusted Advisor

Correct Answer: C

AWS Personal Health Dashboard provides alerts and guidance for AWS events that might affect your environment. While the [Service Health Dashboard](#) shows the general status of AWS services, the Personal Health Dashboard provides proactive and transparent notifications about your specific AWS environment.

All AWS customers can access the Personal Health Dashboard. The Personal Health Dashboard shows recent events to help you manage active events, and shows proactive notifications so that you can plan for scheduled activities. Use these alerts to get notified about changes that can affect your AWS resources, and then follow the guidance to diagnose and resolve issues.

563) A business has many Amazon Web Services accounts and want to streamline and unify its billing process.

Which AWS service is capable of doing this?

- A. AWS Cost and Usage Reports
- B. AWS Organizations
- C. AWS Cost Explorer
- D. AWS Budgets

Correct Answer: B

You can use the consolidated billing feature in AWS Organizations to consolidate billing and payment for multiple AWS accounts or multiple Amazon Internet Services Pvt. Ltd (AISPL) accounts. Every organization in AWS Organizations has a master (payer) account that pays the charges of all the member (linked) accounts.

564) What does it imply when a customer uses AWS to construct a hybrid cloud architecture?

- A. All resources run using on-premises infrastructure.
- B. Some resources run on-premises and some run in a colocation center.
- C. All resources run in the AWS Cloud.
- D. Some resources run on-premises and some run in the AWS Cloud.

Correct Answer: D

Hybrid cloud combines and unifies public cloud, private cloud and on-premises infrastructure to create a single, flexible, cost-optimal IT infrastructure.

565) What is the LEAST expensive AWS Support plan that contains a full set of AWS Trusted Advisor best practice checks?

- A. AWS Enterprise Support
- B. AWS Business Support
- C. AWS Developer Support
- D. AWS Basic Support

Correct Answer: B

AWS Business Support and AWS Enterprise Support customers can access all checks, including cost optimization, security, fault tolerance, performance, and service quotas.

566) A business wishes to anticipate its AWS Cloud expenses for the following year based on historical AWS Cloud spending patterns.

Which Amazon Web Services (AWS) offering should the business employ to achieve this requirement?

- A. AWS Control Tower
- B. Cost Explorer
- C. AWS OpsWorks
- D. AWS CloudFormation

Correct Answer: B

AWS Cost Explorer has an easy-to-use interface that lets you visualize, understand, and manage your AWS costs and usage over time.

567) Which AWS service provides domain registration, DNS routing, and service health checks?

- A. AWS Direct Connect
- B. Amazon Route 53
- C. Amazon CloudFront
- D. Amazon API Gateway

Correct Answer: B

Amazon Route 53 is a highly available and scalable cloud Domain Name System (DNS) web service. It is basically designed for developers and corporate to route the end users to Internet applications by translating human-readable names like www.shapingpixel.com into the numeric IP addresses like 192.0.1.1 that computers use to connect to each other. You cannot use Amazon Route 53 to connect your on-premises network with AWS Cloud.

568) Which AWS service or feature can help to improve network security by restricting requests for a web application hosted on AWS from a certain network? (Select two.)

- A. AWS WAF
- B. AWS Trusted Advisor
- C. AWS Direct Connect
- D. AWS Organizations
- E. Network ACLs

Correct Answer: AE

AWS WAF is a web application firewall that helps protect your web applications or APIs against common web exploits and bots that may affect availability, compromise security, or consume excessive resources.

A *network access control list (ACL)* is an optional layer of security for your VPC that acts as a firewall for controlling traffic in and out of one or more subnets.

569) Which components are necessary to configure an AWS site-to-site VPN connection successfully? (Select two.)

- A. Internet gateway
- B. NAT gateway
- C. Customer gateway
- D. Transit gateway
- E. Virtual private gateway

Correct Answer: CD

570) Which AWS service should be used to migrate a company's on-premises MySQL database to Amazon RDS?

- A. AWS Direct Connect
- B. AWS Server Migration Service (AWS SMS)
- C. AWS Database Migration Service (AWS DMS)
- D. AWS Schema Conversion Tool (AWS SCT)

Correct Answer: C

AWS Database Migration Service (AWS DMS) is a cloud service that makes it possible to migrate relational databases, data warehouses, NoSQL databases, and other types of data stores. You can use AWS DMS to migrate your data into the AWS Cloud or between combinations of cloud and on-premises setups.

571) Which benefits does a company gain when the company moves from on-premises IT architecture to the AWS Cloud? (Choose two.)

- A. Reduced or eliminated tasks for hardware troubleshooting, capacity planning, and procurement
- B. Elimination of the need for trained IT staff
- C. Automatic security configuration of all applications that are migrated to the cloud
- D. Elimination of the need for disaster recovery planning
- E. Faster deployment of new features and applications

Correct Answer: AE

572) A business need security against increased distributed denial of service (DDoS) assaults on its website, as well as help from AWS professionals in the case of such an attack.

Which AWS managed service will satisfy these criteria?

- A. AWS Shield Advanced
- B. AWS Firewall Manager
- C. AWS WAF
- D. Amazon GuardDuty

Correct Answer: A

AWS Shield is a managed Distributed Denial of Service (DDoS) protection service that safeguards applications running on AWS. AWS Shield provides always-on detection and automatic inline mitigations that minimize application downtime and latency, so there is no need to engage AWS Support to benefit from DDoS protection. There are two tiers of AWS Shield - Standard and Advanced.

573) Which of the following is a benefit of decoupling an AWS Cloud architecture?

- A. Reduced latency
- B. Ability to upgrade components independently
- C. Decreased costs
- D. Fewer components to manage

Correct Answer: B

574) A Cloud Practitioner requires a dedicated link between AWS resources and an on-premises system that is constant and devoted.

Which AWS service satisfies this criteria?

- A. AWS Direct Connect
- B. AWS VPN
- C. Amazon Connect
- D. AWS Data Pipeline

Correct Answer: A

You can use AWS Direct Connect to establish a private virtual interface from your on-premise network directly to your Amazon VPC, providing you with a private, high bandwidth network connection between your network and your VPC. With multiple virtual interfaces, you can even establish private connectivity to multiple VPCs while maintaining network isolation.

575) Which task is the responsibility of the customer according to the AWS shared responsibility model?

- A. Maintain the security of the hardware that runs Amazon EC2 instances.
- B. Patch the guest operating system of Amazon EC2 instances.
- C. Protect the security of the AWS global infrastructure.
- D. Patch Amazon RDS software.

Correct Answer: *B*

576) A business requires the migration of a significant amount of data from an on-premises data center to the AWS Cloud. The internet connection at the workplace is sluggish and unstable.

Which Amazon Web Services (AWS) service is capable of facilitating this data transfer?

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

Correct Answer: B

Snowball is a petabyte-scale data transport solution that uses secure appliances to transfer large amounts of data into and out of the AWS cloud. Using Snowball addresses common challenges with large-scale data transfers including high network costs, long transfer times, and security concerns.

577) Which AWS service or functionality allows customers to encrypt data stored in Amazon S3 during the storage process?

- A. IAM policies
- B. Server-side encryption
- C. Amazon GuardDuty
- D. Client-side encryption

Correct Answer: D

Client-Side Encryption – Encrypt data client-side and upload the encrypted data to Amazon S3. In this case, you manage the encryption process, the encryption keys, and related tools.

578) Which AWS Organizations feature can be used to track charges across multiple accounts and report the combined cost?

- A. Service control policies (SCPs)
- B. Cost Explorer
- C. Consolidated billing
- D. AWS Identity and Access Management (IAM)

Correct Answer: C

579) Which of the following is a cloud benefit that AWS offers to its users?

- A. The ability to configure AWS data center hypervisors
- B. The ability to purchase hardware in advance of increased traffic
- C. The ability to deploy to AWS on a global scale
- D. Compliance audits for user IT environments

Correct Answer: C

580) AWS provides which of the following security-related services? (Select two.)

- A. Multi-factor authentication physical tokens
- B. AWS Trusted Advisor security checks
- C. Data encryption
- D. Automated penetration testing
- E. Amazon S3 copyrighted content detection

Correct Answer: BC

- Real-time insight through Trusted Advisor
- Helps protect data via encryption

581) What are the five pillars of the AWS Well-Architected Framework?

- A. Encryption, documentation, speed, hybrid design, and cost optimization
- B. Containerization, cost margins, globalization, marketplace, and developer operations
- C. Network, compute, storage, security, and developer operations
- D. Operational excellence, reliability, performance efficiency, security, and cost optimization

Correct Answer: D

582) A company accepts enrollment applications on handwritten paper forms. The company uses a manual process to enter the form data into its backend systems.

The company wants to automate the process by scanning the forms and capturing the enrollment data from scanned PDF files.

Which AWS service should the company use to build this process?

- A. Amazon Rekognition
- B. Amazon Textract
- C. Amazon Transcribe
- D. Amazon Comprehend

Correct Answer: B

Amazon Textract is a machine learning (ML) service that automatically extracts text, handwriting, and data from scanned documents. It goes beyond simple optical character recognition (OCR) to identify, understand, and extract data from forms and tables.

583) Which AWS service should a company use to organize, characterize, and search large numbers of images?

- A. Amazon Transcribe
- B. Amazon Rekognition
- C. Amazon Aurora
- D. Amazon QuickSight

Correct Answer: B

You use the Amazon Rekognition Image API operations to analyze images stored in an Amazon S3 bucket and image bytes loaded from the local file system. This section also covers getting image orientation information from a .jpg image.

584) A company wants to host a private version control system for its application code in the AWS Cloud. Which AWS service should the company use to meet this requirement?

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

Correct Answer: C

AWS CodeCommit will store code, binaries, and metadata in a redundant fashion with high availability. You will be able to collaborate with local and remote teams to edit, compare, sync, and revise your code.

585) Which AWS service or tool can a company set up to send notifications that a custom spending threshold has been reached or exceeded?

- A. AWS Budgets
- B. AWS Trusted Advisor
- C. AWS CloudTrail
- D. AWS Support

Correct Answer: A

With AWS Budgets, you can choose to be alerted by **email** or SNS notification when actual or forecasted cost and usage exceed your budget threshold, or when your actual RI and Savings Plans' utilization or coverage drops below your desired threshold.

586) Which AWS service is used to host static websites?

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

Correct Answer: A

Amazon S3 is a cloud storage service offered by Amazon Web Services (AWS) that allows users to store and retrieve data from anywhere on the internet. One of the features of S3 is the ability to host static websites, which are websites that consist of fixed HTML pages and other assets such as images, stylesheets, and JavaScript files.

587) Which AWS service contains built-in engines to protect web applications that run in the cloud from SQL injection attacks and cross-site scripting?

- A. AWS WAF
- B. AWS Shield Advanced
- C. Amazon GuardDuty
- D. Amazon Detective

Correct Answer: A

AWS WAF helps protect web applications from attacks by allowing you to configure rules that allow, block, or monitor (count) web requests based on conditions that you define. These conditions include IP addresses, HTTP headers, HTTP body, URI strings, SQL injection and cross-site scripting.

588) A company needs to set up user authentication for a new application. Users must be able to sign in directly with a user name and password, or through a third-party provider.

Which AWS service should the company use to meet these requirements?

- A. AWS Single Sign-On
- B. AWS Signer
- C. Amazon Cognito
- D. AWS Directory Service

Correct Answer: C

Amazon Cognito lets you add user sign-up, sign-in, and access control to your web and mobile apps quickly and easily. Amazon Cognito scales to millions of users and supports sign-in with social identity providers, such as Apple, Facebook, Google, and Amazon, and enterprise identity providers via SAML 2.0 and OpenID Connect.

589) A company's IT team is managing MySQL database server clusters. The IT team has to patch the database and take backup snapshots of the data in the clusters.

The company wants to move this workload to AWS so that these tasks will be completed automatically. What should the company do to meet these requirements?

- A. Deploy MySQL database server clusters on Amazon EC2 instances.
- B. Use Amazon RDS with a MySQL database.
- C. Use an AWS CloudFormation template to deploy MySQL database servers on Amazon EC2 instances.
- D. Migrate all the MySQL database data to Amazon S3.

Correct Answer: B

590) What is the primary use case for Amazon GuardDuty?

- A. Prevention of DDoS attacks
- B. Protection against SQL injection attacks
- C. Automatic monitoring for threats to AWS workloads
- D. Automatic provisioning of AWS resources

Correct Answer: C

Amazon GuardDuty is a threat detection service that continuously monitors your AWS accounts and workloads for malicious activity and delivers detailed security findings for visibility and remediation.

591) A company needs to identify personally identifiable information (PII), such as credit card numbers, from data that is stored in Amazon S3.

Which AWS service should the company use to meet this requirement?

- A. Amazon Inspector
- B. AWS Shield
- C. Amazon GuardDuty
- D. Amazon Macie

Correct Answer: D

Macie automatically detects a large and growing list of sensitive data types, including personally identifiable information (PII) such as names, addresses, and credit card numbers. It also gives you constant visibility of the data security and data privacy of your data stored in Amazon S3.

592) A company wants to forecast future costs and usage of AWS resources based on past consumption. Which AWS service or tool will provide this forecast?

- A. AWS Cost and Usage Report
- B. Amazon Forecast
- C. AWS Pricing Calculator
- D. Cost Explorer

Correct Answer: D

593) Which AWS services are serverless? (Choose two.)

- A. AWS Fargate
- B. Amazon Managed Streaming for Apache Kafka
- C. Amazon EMR
- D. Amazon S3
- E. Amazon EC2

Correct Answer: AD

Serverless applications generally use cloud storage services like Amazon S3 to store application data that doesn't fit into a database. S3 therefore forms the functional basis for all Serverless solutions that handle large files like user-generated data, images, or video content.

594) Which task is the responsibility of AWS, according to the AWS shared responsibility model?

- A. Apply guest operating system patches to Amazon EC2 instances.
- B. Provide monitoring of human resources information management (HRIM) systems.
- C. Perform automated backups of Amazon RDS instances.
- D. Optimize the costs of running AWS services.

Correct Answer: C

Amazon RDS creates and saves automated backups of your DB instance. Amazon RDS creates a storage volume snapshot of your DB instance, backing up the entire DB instance and not just individual databases. Both of which are automatically active when you create an RDS unless you specify otherwise while creating the RDS instance:

595) A company needs to deploy a PostgreSQL database into Amazon RDS. The database must be highly available and fault tolerant.

Which AWS solution should the company use to meet these requirements?

- A. Amazon RDS with a single Availability Zone
- B. Amazon RDS snapshots
- C. Amazon RDS with multiple Availability Zones
- D. AWS Database Migration Service (AWS DMS)

Correct Answer: C

Your Amazon RDS database (DB) instances and their deployments in multiple Availability Zones (AZs) **improve the reliability and availability of your DB Instances**. This makes them an appropriate fit for database workloads in production. Multi-AZ deployment for Amazon RDS instances AWS RDS instance is an isolated database infrastructure in the cloud.

596) A company wants to add facial identification to its user verification process on an application. Which AWS service should the company use to meet this requirement?

- A. Amazon Polly
- B. Amazon Transcribe
- C. Amazon Lex
- D. Amazon Rekognition

Correct Answer: D

Amazon Rekognition can store information about detected faces in server-side containers known as collections. You can use the facial information that's stored in a collection to search for known faces in images, stored videos, and streaming videos.

597) A company wants the ability to quickly upload its applications to the AWS Cloud without needing to provision underlying resources.

Which AWS service will meet these requirements?

- A. AWS CloudFormation
- B. AWS Elastic Beanstalk
- C. AWS CodeDeploy
- D. AWS CodeCommit

Correct Answer: B

With Elastic Beanstalk, you can quickly deploy and manage applications in the AWS Cloud without having to learn about the infrastructure that runs those applications.

598) Which AWS service monitors CPU utilization on Amazon EC2 instances?

- A. AWS CloudTrail
- B. Amazon Inspector
- C. AWS Config
- D. Amazon CloudWatch

Correct Answer: D

you can monitor the CPU usage and disk reads and writes of your Amazon EC2 instances and then use that data to determine whether you should launch additional instances to handle increased load. You can also use this data to stop under-used instances to save money.
With CloudWatch, you gain system-wide visibility into resource utilization, application performance, and operational health.

599) A company needs to label its AWS resources so that the company can categorize and track costs. What should the company do to meet this requirement?

- A. Use cost allocation tags.
- B. Use AWS Identity and Access Management (IAM).
- C. Use AWS Organizations.
- D. Use the AWS Cost Management coverage report.

Correct Answer: A

AWS uses the **cost allocation tags** to organize your resource costs on your cost allocation report, to make it easier for you to categorize and track your AWS costs.

600) A company wants its employees to have access to virtual desktop infrastructure to securely access company-provided desktops through the employees' personal devices. Which AWS service should the company use to meet these requirements?

- A. Amazon AppStream 2.0
- B. AWS AppSync
- C. Amazon FSx for Windows File Server
- D. Amazon WorkSpaces

Correct Answer: D

Amazon WorkSpaces

Provide a secure, managed Desktop-as-a-Service (DaaS) to your end users

601) A user has been granted permission to change their own IAM user password. Which AWS services can the user use to change the password? (Choose two.)

- A. AWS Command Line Interface (AWS CLI)
- B. AWS Key Management Service (AWS KMS)
- C. AWS Management Console
- D. AWS Resource Access Manager (AWS RAM)
- E. AWS Secrets Manager

Correct Answer: AC

AWS Management Console - The home page provides access to each service console and offers a single place to access the information you need to perform your AWS related tasks. It also lets you customize the Console Home experience by adding, removing, and rearranging widgets such as **Recently visited**, **AWS Health**, **Trusted Advisor**, and more.

602) A company needs to run an application on Amazon EC2 instances. The instances cannot be interrupted at any time. The company needs an instance purchasing option that requires no long-term commitment or upfront payment.

Which instance purchasing option will meet these requirements MOST cost-effectively?

- A. On-Demand Instances
- B. Spot Instances
- C. Dedicated Hosts
- D. Reserved Instances

Correct Answer: A

AWS recommends using On-Demand Instances for applications with short-term, irregular workloads that cannot be interrupted. They are also suitable for use during testing and development of applications on EC2.

603) A company uses Amazon EC2 instances to run its web application. The company uses On-Demand Instances and Spot Instances. The company needs to visualize its monthly spending on both types of instances.

Which AWS service or feature will meet this requirement?

- A. AWS Cost Explorer
- B. AWS Budgets
- C. Amazon CloudWatch
- D. AWS Cost Categories

Correct Answer: A

AWS Cost Explorer has an easy-to-use interface that lets you visualize, understand, and manage your AWS costs and usage over time.

604) Which task can a user complete by using AWS Identity and Access Management (IAM)?

- A. Validate JSON syntax from an application configuration file.
- B. Analyze logs from an Amazon API Gateway call.
- C. Filter traffic to or from an Amazon EC2 instance.
- D. Grant permissions to applications that run on Amazon EC2 instances.

Correct Answer: D

With AWS Identity and Access Management (IAM), you can specify who or what can access services and resources in AWS, centrally manage fine-grained permissions, and analyse access to refine permissions across AWS.

605) A company needs to generate reports for business intelligence and operational analytics on petabytes of semistructured and structured data. These reports are produced from standard SQL queries on data that is in an Amazon S3 data lake.

Which AWS service provides the ability to analyze this data?

- A. Amazon RDS
- B. Amazon Neptune
- C. Amazon DynamoDB
- D. Amazon Redshift

Correct Answer: D

Amazon Redshift is a fast, fully managed, cloud-native data warehouse that makes it simple and cost-effective to analyze all your data using standard SQL and your existing business intelligence (BI) tools.

606) A system automatically recovers from failure when a company launches its workload on the AWS Cloud services platform.

Which pillar of the AWS Well-Architected Framework does this situation demonstrate?

- A. Cost optimization
- B. Operational excellence
- C. Performance efficiency
- D. Reliability

Correct Answer: D

•The Reliability pillar includes the ability of a workload to perform its intended function correctly and consistently when its expected to. this includes the ability to operate and test the workload through its total lifecycle.

607) Which of the following describes AWS Local Zones?

- A. A cluster of data centers in one geographic location
- B. A site used by Amazon CloudFront to cache frequently accessed content
- C. An extension of an AWS Region to more granular locations Ans: C
- D. One or more data centers with redundant power and networking

Correct Answer: C

608) A retail company is migrating its IT infrastructure applications from on premises to the AWS Cloud. Which costs will the company eliminate with this migration? (Choose two.)

- A. Cost of data center operations
- B. Cost of application licensing
- C. Cost of marketing campaigns
- D. Cost of physical server hardware
- E. Cost of network management

Correct Answer: AD

609) What is a benefit of moving to the AWS Cloud in terms of improving time to market?

- A. Decreased deployment speed
- B. Increased application security
- C. Increased business agility
- D. Increased backup capabilities

Correct Answer: C

610) Which of the following are characteristics of a serverless application that runs in the AWS Cloud? (Choose two.)

- A. Users must manually configure Amazon EC2 instances.
- B. Users have a choice of operating systems.
- C. The application has built-in fault tolerance.
- D. Users can run Amazon EC2 Spot Instances.
- E. The application can scale based on demand.

Correct Answer: CE

611) A company has existing software licenses that it wants to bring to AWS, but the licensing model requires licensing physical cores.

How can the company meet this requirement in the AWS Cloud?

- A. Launch an Amazon EC2 instance with default tenancy.
- B. Launch an Amazon EC2 instance on a Dedicated Host.
- C. Create an On-Demand Capacity Reservation.
- D. Purchase Dedicated Reserved Instances.

Correct Answer: B

612) Which of the following is an advantage that the AWS Cloud provides to users?

- A. Users eliminate the need to guess about infrastructure capacity requirements.
- B. Users decrease their variable costs by maintaining sole ownership of IT hardware.
- C. Users maintain control of underlying IT infrastructure hardware.
- D. Users maintain control of operating systems for managed services.

Correct Answer: A

613) Which AWS services can use AWS WAF to protect against common web exploitations? (Choose two.)

- A. Amazon Route 53
- B. Amazon CloudFront
- C. AWS Transfer Family
- D. AWS Site-to-Site VPN
- E. Amazon API Gateway

Correct Answer: BE

When you create a web ACL, you can specify one or more CloudFront distributions that you want AWS WAF to inspect. AWS WAF starts to inspect and manage web requests for those distributions based on the criteria that you identify in the web ACL. CloudFront provides some features that enhance the AWS WAF functionality.

614) Which controls are shared under the AWS shared responsibility model?
(Choose two.)

- A. Awareness and training
- B. Patching of Amazon RDS
- C. Configuration management
- D. Physical and environmental controls
- E. Service and communications protection or security

Correct Answer: AC

Shared Controls – Controls which apply to both the infrastructure layer and customer layers, but in completely separate contexts or perspectives. In a shared control, AWS provides the requirements for the infrastructure and the customer must provide their own control implementation within their use of AWS services. Examples include:

- Patch Management – AWS is responsible for patching and fixing flaws within the infrastructure, but customers are responsible for patching their guest OS and applications.
- Configuration Management – AWS maintains the configuration of its infrastructure devices, but a customer is responsible for configuring their own guest operating systems, databases, and applications.
- Awareness & Training - AWS trains AWS employees, but a customer must train their own employees.

615) A company manages global applications that require static IP addresses.

Which AWS service would enable the company to improve the availability and performance of its applications?

- A. Amazon CloudFront
- B. AWS Global Accelerator
- C. Amazon S3 Transfer Acceleration
- D. Amazon API Gateway

Correct Answer: B

AWS Global Accelerator is a service that improves the availability and performance of global applications by routing traffic to the optimal AWS region for a given user. It uses Anycast technology, which directs traffic to the nearest healthy endpoint and it allows to provision a set of static IP addresses that act as a fixed entry point to the applications hosted in one or more AWS regions. This service can be useful for the company that manages global applications that require static IP addresses and want to improve the availability and performance of their applications, as it enables the company to provide users with low-latency access to their applications, even when the underlying infrastructure is distributed across multiple regions.

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

- A. Amazon Lightsail
- B. AWS Systems Manager
- C. AWS CloudFormation
- D. AWS Batch
- E. Amazon Inspector

Correct Answer: AD

Amazon Lightsail is a simplified compute service that makes it easy for developers, small businesses, and startups to launch and manage web applications, databases, and more. Lightsail includes everything needed to launch and run web applications, including a virtual private server (VPS), storage, data transfer, DNS, and a static IP address.

AWS Batch is a service that makes it easy to run batch computing workloads on the AWS Cloud. It enables developers, scientists, and engineers to easily and efficiently run hundreds of thousands of batch computing jobs on a managed cluster of Amazon EC2 instances.

617) A company needs to report on events that involve the specific AWS services that the company uses. Which AWS service or resource can the company use with Amazon CloudWatch to meet this requirement?

- A. Amazon Inspector
- B. AWS Personal Health Dashboard
- C. AWS Trusted Advisor
- D. AWS CloudTrail logs

Correct Answer: D

•AWS CloudTrail is a service that **records AWS API calls and events for Amazon Web Services accounts**. CloudTrail logs include details about any API calls made to your AWS services, including the console. CloudTrail generates encrypted log files and stores them in Amazon S3.

618) A company with AWS Enterprise Support needs help understanding its monthly AWS bill and wants to implement billing best practices.

Which AWS tool or resource is available to accomplish these goals?

- A. Resource tagging
- B. AWS Concierge Support team
- C. AWS Abuse team
- D. AWS Support

Correct Answer: B

- AWS Support Concierge Included as part of the Enterprise Support plan, the Support Concierge Team are **AWS billing and account experts** that specialize in working with enterprise accounts.

619) Which of the following is an AWS key-value database offering consistent single-digit millisecond performance at any scale?

- A. Amazon RDS
- B. Amazon Aurora
- C. Amazon DynamoDB
- D. Amazon Redshift

Correct Answer: C

Amazon DynamoDB is a fully managed, highly scalable key-value database service that delivers consistent single-digit millisecond performance at any scale. It allows you to store and retrieve any amount of data, and serves any level of request traffic. DynamoDB automatically spreads the data and traffic for a table over a sufficient number of servers to handle the request capacity specified by the customer and the amount of data stored, while maintaining consistent and fast performance.

620) A company is developing a new Node.js application. The application must have a scalable NoSQL database to meet increasing demand as the popularity of the application grows.
Which AWS service will meet the requirements for the database?

- A. Amazon Aurora Serverless
- B. Amazon ElastiCache
- C. Amazon DynamoDB
- D. Amazon Redshift

Correct Answer: C

Amazon DynamoDB is a fully managed, highly scalable NoSQL database service that is well suited for building highly available, scalable, and performant applications. It is a key-value and document database that supports both document and key-value data models. It allows you to store and retrieve any amount of data, and serves any level of request traffic. DynamoDB automatically spreads the data and traffic for a table over a sufficient number of servers to handle the request capacity specified by the customer and the amount of data stored, while maintaining consistent and fast performance.

621) A company wants to set up an entire development and continuous delivery toolchain for coding, building, testing, and deploying code.

Which AWS service will meet these requirements?

- A. Amazon CodeGuru
- B. AWS CodeStar
- C. AWS CodeCommit
- D. AWS CodeDeploy

Correct Answer: B

AWS CodeStar enables you to quickly develop, build, and deploy applications on AWS. AWS CodeStar provides a unified user interface, enabling you to easily manage your software development activities in one place. With AWS CodeStar, you can set up your entire continuous delivery toolchain in minutes, allowing you to start releasing code faster.

622) Which service enables customers to audit API calls in their AWS accounts?

- A. AWS CloudTrail
- B. AWS Trusted Advisor
- C. Amazon Inspector
- D. AWS X-Ray

Correct Answer: A

AWS CloudTrail is a service that enables customers to audit API calls in their AWS accounts. It captures API calls made to AWS services, including the identity of the API caller, the time of the API call, the source IP address of the API caller, the request parameters, and the response elements returned by the service. CloudTrail logs are stored in an S3 bucket and can be analyzed using tools such as Amazon Athena, Amazon EMR, and AWS Glue, to identify trends and troubleshoot issues.

623) A company is moving its office and must establish an encrypted connection to AWS. Which AWS service will help meet this requirement?

- A. AWS VPN
- B. Amazon Route 53
- C. Amazon API Gateway
- D. Amazon Connect

Correct Answer: A

AWS Virtual Private Network (VPN) is a service that enables customers to establish an encrypted connection to the AWS infrastructure. A VPN connection can be used to connect the company's office network to the AWS cloud, allowing the company to access their data and applications securely and with minimal latency. AWS VPN supports both Internet Protocol security (IPsec) and Secure Sockets Layer (SSL) protocols, and can be used to connect to VPCs, AWS Direct Connect, and other AWS services.

624) A company needs steady and predictable performance from its Amazon EC2 instances at the lowest possible cost. The company also needs the ability to scale resources to ensure that it has the right resources available at the right time.

Which AWS service or resource will meet these requirements?

- A. Amazon CloudWatch
- B. Application Load Balancer
- C. AWS Batch
- D. Amazon EC2 Auto Scaling

Correct Answer: D

Amazon EC2 Auto Scaling is a service that automatically adjusts the number of Amazon Elastic Compute Cloud (EC2) instances in response to changes in demand for the application. It enables the company to scale resources to ensure that it has the right resources available at the right time, while keeping costs low. It also allows customers to maintain steady and predictable performance by automatically increasing or decreasing the number of EC2 instances based on predefined policies and schedules.

625) Which action will provide documentation to help a company evaluate whether its use of the AWS Cloud is compliant with local regulatory standards?

- A. Running Amazon GuardDuty
- B. Using AWS Artifact
- C. Creating an AWS Support ticket
- D. Evaluating AWS CloudTrail logs

Correct Answer: *B*

AWS Artifact is your go-to, central resource for compliance-related information that matters to you. It provides on-demand access to security and compliance reports from AWS and ISVs who sell their products on AWS Marketplace.

626) A company wants a cost-effective option when running its applications in an Amazon EC2 instance for short time periods. The applications can be interrupted. Which EC2 instance type will meet these requirements?

- A. Spot Instances
- B. On-Demand Instances
- C. Reserved Instances
- D. Dedicated Instances

Correct Answer: A

A Spot Instance is an instance that uses **spare EC2 capacity that is available for less than the On-Demand price**. Because Spot Instances enable you to request unused EC2 instances at steep discounts, you can lower your Amazon EC2 costs significantly. The hourly price for a Spot Instance is called a Spot price.

627) A retail company is building a new mobile app. The company is evaluating whether to build the app at an on-premises data center or in the AWS Cloud.

Which of the following are benefits of building this app in the AWS Cloud? (Choose two.)

- A. A large, upfront capital expense and low variable expenses
- B. Increased speed for trying out new projects
- C. Complete control over the physical security of the infrastructure
- D. Flexibility to scale up in minutes as the application becomes popular
- E. Ability to pick the specific data centers that will host the application servers

Correct Answer: BD

628) A developer is working on enhancing applications at AWS. The developer needs a service that can securely host GitHub-based code, repositories, and version controls.

Which AWS service should the developer use?

- A. AWS CodeStar
- B. Amazon CodeGuru
- C. AWS CodeCommit
- D. AWS CodePipeline

Correct Answer: C

AWS CodeCommit is a fully managed source control service that makes it easy for the developer to host Git-based code, repositories, and version controls securely. CodeCommit provides a fully managed service, which means that it automatically scales to meet the needs of the developer's repositories and integrates with AWS services like IAM for access control and CloudTrail for auditing. The developer can use CodeCommit to store, manage, and track code changes for software development projects, it's especially useful for developers who want to use Git-based version control system but don't want to manage their own infrastructure.

629) What is an AWS Region?

- A. A broad set of global, cloud-based products that include compute, storage, and databases
- B. A physical location around the world where data centers are clustered
- C. One or more discrete data centers with redundant power, networking, and connectivity
- D. A service that developers use to build applications that deliver latencies of single-digit milliseconds to users

Correct Answer: B

An AWS Region is a physical location around the world where AWS has multiple data centers. Each Region is designed to be isolated from the other regions, and provides a low-latency network connection to other regions. This allows customers to store data and run applications closer to their customers and end-users, and provides better performance, lower latencies, and compliance with data sovereignty and other regulatory requirements. AWS currently has more than 60 regions across the world, each region contains one or more availability zones, which are discrete data centers with redundant power, networking, and connectivity.

630) Which AWS benefit enables users to deploy cloud infrastructure that consists of multiple geographic regions connected by a network with low latency, high throughput, and redundancy?

- A. Economies of scale
- B. Security
- C. Elasticity
- D. Global reach

Correct Answer: D

AWS Global Reach enables users to deploy cloud infrastructure that consists of multiple geographic regions connected by a network with low latency, high throughput, and redundancy. This allows users to store data and run applications closer to their customers and end-users, providing better performance, lower latencies, and compliance with data sovereignty and other regulatory requirements. This feature enables customers to select the region where their data will be stored, and also allows customers to distribute their applications across multiple regions for high availability and disaster recovery.

631) A company is considering a migration from on premises to the AWS Cloud. The company's IT team needs to offload support of the workload.

What should the IT team do to accomplish this goal?

- A. Use AWS Managed Services to provision, run, and support the company infrastructure.
- B. Build hardware refreshes into the operational calendar to ensure availability.
- C. Use Amazon Elastic Container Service (Amazon ECS) on Amazon EC2 instances.
- D. Overprovision compute capacity for seasonal events and traffic spikes to prevent downtime.

Correct Answer: A

632) What is a benefit of using AWS serverless computing?

- A. Application deployment and management are not required.
- B. Application security will be fully managed by AWS.
- C. Monitoring and logging are not needed.
- D. Management of infrastructure is offloaded to AWS.

Correct Answer: D

633) A company plans to launch an application that will run in multiple locations within the United States. The company needs to identify the two AWS Regions where the application can operate at the lowest price. Which AWS service or feature should the company use to determine the Regions that offer the lowest price?

- A. Cost Explorer
- B. AWS Budgets
- C. AWS Trusted Advisor
- D. AWS Pricing Calculator

Correct Answer: D

Groups are also useful to compare AWS Regions. By creating a group for each Region, you can compare the cost to run servers in two different locations. For example, you can generate an estimate for US East (N. Virginia) in one group and Asia Pacific (Seoul) for another. Then, you can compare your two estimates to meet your specific use case and budget.

634) Which approach will enhance a user's security on AWS?

- A. Use Multi-AZ deployments with Amazon RDS.
- B. Create a hybrid architecture by using AWS Direct Connect.
- C. Monitor application-specific information with AWS X-Ray.
- D. Encrypt data by using AWS Key Management Service (AWS KMS).

Correct Answer: D

Encrypting data by using AWS Key Management Service (AWS KMS) is an approach that will enhance a user's security on AWS. AWS KMS is a service that allows users to create and manage encryption keys used to encrypt and decrypt data. By using KMS to encrypt data, users can secure data at rest and in transit, meet compliance requirements, and maintain control over their encryption keys.

635) Which AWS service or tool is associated with an Amazon EC2 instance and acts as a virtual firewall to control inbound and outbound traffic?

- A. AWS WAF
- B. AWS Shield
- C. Network access control list (ACL)
- D. Security group

Correct Answer: D

A security group is an AWS service or tool that is associated with an Amazon EC2 instance and acts as a virtual firewall to control inbound and outbound traffic. Security groups enable you to specify which traffic is allowed to reach your instances, based on a set of rules that you define. Security groups act at the instance level, not the subnet level, so each instance in a subnet in your VPC must be associated with a security group. You can add or remove rules from a security group at any time, and you can associate multiple security groups with a single instance.

636) A company wants to migrate its on-premises Microsoft SQL Server database server to the AWS Cloud. The company has decided to use Amazon EC2 instances to run this database.
Which of the following is the company responsible for managing, according to the AWS shared responsibility model?

- A. EC2 hypervisor
- B. Security patching of the guest operating system
- C. Network connectivity of the host server
- D. Uptime service level agreement (SLA) for the EC2 instances

Correct Answer: B

According to the AWS shared responsibility model, when a company uses Amazon EC2 instances to run a Microsoft SQL Server database, the company is responsible for managing the security patching of the guest operating system. This includes ensuring that the operating system is updated with the latest security patches, and that the database software is configured securely.

637) A developer wants to deploy an application on a container-based service. The service must automatically provision and manage the backend instances. The service must provision only the necessary resources. Which AWS service will meet these requirements?

- A. Amazon EC2
- B. Amazon Lightsail
- C. Amazon Elastic Kubernetes Service (Amazon EKS)
- D. AWS Fargate

Correct Answer: D

Fargate is a serverless compute engine for containers that allows you to run containers without having to manage the underlying EC2 instances, this service automatically provisions and manages the resources required to run the containers. Fargate will only provision the necessary resources, like CPU and memory, for the containers, this feature ensures that the developer doesn't have to over-allocate resources and pay for resources they don't use.

638) Which tasks require use of the AWS account root user? (Choose two.)

- A. Changing an AWS Support plan
- B. Modifying an Amazon EC2 instance type
- C. Grouping resources in AWS Systems Manager
- D. Running applications in Amazon Elastic Kubernetes Service (Amazon EKS)
- E. Closing an AWS account

Correct Answer: AE

A. Changing an AWS Support plan: The AWS account root user has the permissions to change the AWS Support plan that is associated with the account. This can be done by logging in to the AWS Management Console, navigating to the Support Center, and selecting the appropriate plan.

E. Closing an AWS account: The AWS account root user has the permissions to close an AWS account. This is a permanent action and cannot be undone, it will delete all resources associated with the account, including all data and configurations. Before closing the account, the root user should ensure that all resources are backed up and that any necessary permissions or access keys have been revoked. This can be done via AWS Management Console, AWS Support page.

639) Which AWS service enables the decoupling and scaling of applications?

- A. Amazon Simple Queue Service (Amazon SQS)
- B. AWS Outposts
- C. Amazon S3
- D. Amazon Simple Email Service (Amazon SES)

Correct Answer: A

The **decoupling** allows processing incoming requests later on. So when the consumer is overloaded it will just wait before getting another message. This way our applications become more fault-tolerant.

Amazon Simple Queue Service(SQS) is a fully managed queue service in the AWS cloud.

640) How does consolidated billing help reduce costs for a company that has multiple AWS accounts?

- A. It aggregates usage across accounts so that the company can reach volume discount thresholds sooner.
- B. It offers an additional 5% discount on purchases of All Upfront Reserved Instances.
- C. It provides a simplified billing invoice that the company can process more quickly than a standard invoice.
- D. It gives AWS resellers the ability to bill their customers for usage.

Correct Answer: A

Combined usage – You can combine the usage across all accounts in the organization to share the volume pricing discounts, Reserved Instance discounts, and Savings Plans. This can result in a lower charge for your project, department, or company than with individual standalone accounts.

641) A company wants to secure its consumer web application by using SSL/TLS to encrypt traffic. Which AWS service can the company use to meet this goal?

- A. AWS WAF
- B. AWS Shield
- C. Amazon VPC
- D. AWS Certificate Manager (ACM)

Correct Answer: D

Use AWS Certificate Manager (ACM) to provision, manage, and deploy public and private SSL/TLS certificates for use with AWS services and your internal connected resources. ACM removes the time-consuming manual process of purchasing, uploading, and renewing SSL/TLS certificates.

642) Which of the following are advantages of moving to the AWS Cloud? (Choose two.)

- A. Users can implement all AWS services in seconds.
- B. AWS assumes all responsibility for the security of infrastructure and applications.
- C. Users experience increased speed and agility.
- D. Users benefit from massive economies of scale.
- E. Users can move hardware from their data center to the AWS Cloud.

Correct Answer: CD

643) A company stores configuration files in an Amazon S3 bucket. These configuration files must be accessed by applications that are running on Amazon EC2 instances.

According to AWS security best practices, how should the company grant permissions to allow the applications for access the S3 bucket?

- A. Use the AWS account root user access keys.
- B. Use the AWS access key ID and the EC2 secret access key.
- C. Use an IAM role with the necessary permissions.
- D. Activate multi-factor authentication (MFA) and versioning on the S3 bucket.

Correct Answer: C

644) A company needs an AWS service that will continuously monitor the company's AWS account for suspicious activity. The service must have the ability to initiate automated actions against threats that are identified in the security findings.

Which service will meet these requirements?

- A. AWS Trusted Advisor
- B. Amazon Detective
- C. Amazon Inspector
- D. Amazon GuardDuty

Correct Answer: D

Amazon GuardDuty is a threat detection service that continuously monitors your AWS accounts and workloads for malicious activity and delivers detailed security findings for visibility and remediation.

645) A company wants to analyze streaming user data and respond to customer queries in real time. Which AWS service can meet these requirements?

- A. Amazon QuickSight
- B. Amazon Redshift
- C. Amazon Kinesis Data Analytics
- D. AWS Data Pipeline

Correct Answer: C

Amazon Kinesis Data Analytics is the easiest way to transform and analyze streaming data in real time using Apache Flink.

646) Who can create and manage access keys for an AWS account root user?

- A. The AWS account owner
- B. An IAM user that has administrator permissions
- C. IAM users within a designated group
- D. An IAM user that has the required role

Correct Answer: A

The AWS account root user is the master user for the AWS account and has full access to all resources and services. Only the AWS account owner can create and manage access keys for the root user, as they have the highest level of permissions within the account. It is not recommended to use the root user for regular activities. Instead, create an IAM user with necessary permissions and use that user for day-to-day activities.

647) Which AWS service can help a company detect an outage of its website servers and redirect users to alternate servers?

- A. Amazon CloudFront
- B. Amazon GuardDuty
- C. Amazon Route 53
- D. AWS Trusted Advisor

Correct Answer: C

Amazon Route 53 is a highly available and scalable Domain Name System (DNS) web service. It can be used to detect an outage of a company's website servers and redirect users to alternate servers through the use of health checks and failover routing policies. It can also be used to route users to the optimal location for faster content delivery using geographic routing.

648) A web application is hosted on AWS using an Elastic Load Balancer, multiple Amazon EC2 instances, and Amazon RDS.

Which security measures fall under the responsibility of AWS? (Choose two.)

- A. Running a virus scan on EC2 instances
- B. Protecting against IP spoofing and packet sniffing
- C. Installing the latest security patches on the RDS instance
- D. Encrypting communication between the EC2 instances and the Elastic Load Balancer
- E. Configuring a security group and a network access control list (NACL) for EC2 instances

Correct Answer: BC

649) Which of the following is an AWS Well-Architected Framework design principle for operational excellence in the AWS Cloud?

- A. Go global in minutes.
- B. Make frequent, small, reversible changes.
- C. Implement a strong foundation of identity and access management.
- D. Stop spending money on hardware infrastructure for data center operations.

Correct Answer: B

- **Make frequent, small, reversible changes:** Design workloads to allow components to be updated regularly. Make changes in small increments that can be reversed if they fail (without affecting customers when possible).

650) Which AWS service provides intelligent recommendations to improve code quality and identify an application's most expensive lines of code?

- A. Amazon CodeGuru
- B. AWS CodeStar
- C. AWS CodeCommit
- D. AWS CodeDeploy

Correct Answer: A

Amazon CodeGuru is a developer tool that provides intelligent recommendations to improve code quality and identify an application's most expensive lines of code.

651) A company wants to expand from one AWS Region into a second AWS Region.
What does the company need to do to expand into the second Region?

- A. Contact an AWS account manager to sign a new contract.
- B. Move an Availability Zone to the second Region.
- C. Begin to deploy resources in the second Region.
- D. Download the AWS Management Console for the second Region.

Correct Answer: C

652) Which AWS service provides storage that can be mounted across multiple Amazon EC2 instances?

- A. Amazon WorkSpaces
- B. Amazon Elastic File System (Amazon EFS)
- C. AWS Database Migration Service (AWS DMS)
- D. AWS Snowball Edge

Correct Answer: B

EFS is a [file storage service](#) for use with Amazon compute (EC2, containers, serverless) and on-premises servers. EFS provides a file system interface, file system access semantics (such as strong consistency and file locking), and concurrently accessible storage for up to thousands of EC2 instances.

653) A company needs to deploy applications in the AWS Cloud as quickly as possible. The company also needs to minimize the complexity that is related to the management of AWS resources. Which AWS service should the company use to meet these requirements?

- A. AWS Config
- B. AWS Elastic Beanstalk
- C. Amazon EC2
- D. Amazon Personalize

Correct Answer: B

AWS Elastic Beanstalk is a service that lets you deploy web applications and services on the cloud without worrying about the infrastructure details.

654) Which of the following is a way to use Amazon EC2 Auto Scaling groups to scale capacity in the AWS Cloud?

- A. Scale the number of EC2 instances in or out automatically, based on demand.
- B. Use serverless EC2 instances.
- C. Scale the size of EC2 instances up or down automatically, based on demand.
- D. Transfer unused CPU resources between EC2 instances.

Correct Answer: A

Amazon EC2 Auto Scaling groups allows you to automatically scale the number of Amazon Elastic Compute Cloud (EC2) instances in your application in or out, in response to changes in demand for your application. This helps ensure that you have the correct number of instances running to handle the traffic to your application. Auto Scaling can be configured to use CloudWatch alarms to determine when to scale the number of instances, and it can also be configured to scale based on a schedule. This can be done by creating policies that increase or decrease the number of instances, based on CloudWatch metrics, schedule or even by using a custom metric.

655) A company discovered unauthorized access to resources in its on-premises data center. Upon investigation, the company found that the requests originated from a resource hosted on AWS. Which AWS team should the company contact to report this issue?

- A. AWS Customer Service team
- B. AWS Sales team
- C. AWS Abuse team
- D. AWS Technical Support team

Correct Answer: C

If you suspect that AWS resources are used for abusive purposes, contact the AWS Trust & Safety team using the [Report Amazon AWS abuse form](#), or by contacting abuse@amazonaws.com. Provide all the necessary information, including logs in plaintext, email headers, and so on, when you submit your request.

656) Which of the following are aspects of the AWS shared responsibility model? (Choose two.)

- A. Configuration management of infrastructure devices is the customer's responsibility.
- B. For Amazon S3, AWS operates the infrastructure layer, the operating systems, and the platforms.
- C. AWS is responsible for protecting the physical cloud infrastructure.
- D. AWS is responsible for training the customer's employees on AWS products and services.
- E. For Amazon EC2, AWS is responsible for maintaining the guest operating system.

Correct Answer: BC

657) A company needs real-time guidance to follow AWS best practices to save money, improve system performance, and close security gaps.

Which AWS service should the company use?

- A. Amazon GuardDuty
- B. AWS Trusted Advisor
- C. AWS Management Console
- D. AWS Systems Manager

Correct Answer: *B*

AWS Trusted Advisor can save you money on AWS by eliminating unused and idle resources or by making commitments to reserved capacity. AWS Trusted Advisor can improve the performance of your service by checking your service limits, ensuring you take advantage of provisioned throughput, and monitoring for overutilized instances.

658) A company wants to organize its users so that the company can grant permissions to the users as a group. Which AWS service or tool can the company use to meet this requirement?

- A. Security groups
- B. AWS Identity and Access Management (IAM)
- C. Resource groups
- D. AWS Security Hub

Correct Answer: B

AWS Identity and Access Management (IAM) is a service that enables the company to control and manage access to AWS resources. IAM allows the company to create and manage users, groups and roles, and to grant permissions to those groups and roles. This enables the company to grant permissions to a group of users, rather than having to grant permissions individually to each user. With IAM, the company can create IAM users and groups and then grant permissions to those groups using policies. This allows the company to grant permissions to a set of users as a group, which helps to simplify the process of managing access to resources.

659) A company runs applications that process credit card information. Auditors have asked if the AWS environment has changed since the previous audit. If the AWS environment has changed, the auditors want to know how it has changed.

Which AWS services can provide this information? (Choose two.)

- A. AWS Artifact
- B. AWS Trusted Advisor
- C. AWS Config
- D. AWS CloudTrail
- E. AWS Identity and Access Management (IAM)

Correct Answer: CD

AWS Config is a fully managed service that provides you with an AWS resource inventory, configuration history, and configuration change notifications to enable security and governance.

660) A company wants to use a template to reliably provision, manage, and update its infrastructure in the AWS Cloud.

Which AWS service will meet these requirements?

- A. AWS Lambda
- B. AWS CloudFormation
- C. AWS Fargate
- D. AWS CodeDeploy

Correct Answer: *B*

When you use that template to create a CloudFormation stack, CloudFormation provisions the Auto Scaling group, load balancer, and database for you. After the stack has been successfully created, your AWS resources are up and running. You can delete the stack just as easily, which deletes all the resources in the stack. By using CloudFormation, you easily manage a collection of resources as a single unit.

661) A company is reviewing the current costs of running its own infrastructure on premises. The company wants to compare these on-premises costs to the costs of running infrastructure in the AWS Cloud.

How should the company make this comparison?

- A. Review the AWS shared responsibility model.
- B. Audit existing software and hardware licensing costs.
- C. Analyze the AWS Well-Architected Framework.
- D. Use Migration Evaluator.

Correct Answer: D

662) A company needs a low-code, visual workflow service that developers can use to build distributed applications.

Which AWS service is designed to meet these requirements?

- A. AWS Step Functions
- B. AWS Config
- C. AWS Lambda
- D. Amazon CloudWatch

Correct Answer: A

Step Functions manages your application's components and logic, so you can write less code and focus on building and updating your application quickly.

663) A company wants to accelerate migration from its data center to the AWS Cloud. Which combination of AWS services should the company use to meet this requirement? (Choose two.)

- A. Amazon Connect
- B. AWS Direct Connect
- C. AWS Server Migration Service (AWS SMS)
- D. Amazon Route 53
- E. AWS Organizations

Correct Answer: BC

AWS Server Migration Service (AWS SMS) automates the migration of your on-premises VMware vSphere, Microsoft Hyper-V/SCVMM, and Azure virtual machines to the AWS Cloud. AWS SMS incrementally replicates your server VMs as cloud-hosted Amazon Machine Images (AMIs) ready for deployment on Amazon EC2. Working with AMIs, you can easily test and update your cloud-based images before deploying them in production.

664) A company wants to deploy a Docker application to the AWS Cloud. However, the company does not want to manage the underlying servers.

Which combination of AWS services should the company use to meet these requirements? (Choose two.)

- A. Amazon EC2
- B. Amazon EC2 Auto Scaling
- C. AWS Elastic Beanstalk
- D. Amazon CloudFront
- E. AWS Fargate

Correct Answer: CE

AWS Elastic Beanstalk can launch **Docker** environments by building an image described in a **Dockerfile** or pulling a remote **Docker** image.

AWS Fargate is an easy way to deploy your containers on AWS. To put it simply, Fargate is like EC2 but instead of giving you a virtual machine you get a container. It's a compute engine that allows you to use containers as a fundamental compute primitive without having to manage the underlying instances.

665) A company needs to transfer 60 TB of data to the AWS Cloud in a secure manner.

Which of the following should the company use to meet these requirements?

- A. AWS Snowball Edge device
- B. Amazon Elastic Block Store (Amazon EBS)
- C. Amazon Elastic File System (Amazon EFS)
- D. Amazon S3

Correct Answer: A

Each Snowball Edge device can transport data at speeds faster than the internet. This transport is done by shipping the data in the appliances through a regional carrier.

666) A gaming company wants to move its on-premises environment to AWS. The company needs its resources to be highly available.

Which benefit does the AWS Cloud provide to meet this requirement?

- A. Reliability
- B. The AWS shared responsibility model
- C. Security
- D. Agility

Correct Answer: A

AWS provides a highly available and reliable infrastructure, which can help the gaming company to ensure that its resources are always available to its users. The AWS Cloud provides a variety of services and features that can be used to achieve high availability, such as Amazon Elastic Compute Cloud (EC2) Auto Scaling, Amazon Elastic Block Store (EBS) and Amazon Elastic File System (EFS), which can help the company to automatically scale its resources to handle changes in demand, and to ensure that its data is stored on multiple servers to protect against data loss.

667) An ecommerce company has been monitoring usage of its online store that is hosted on a fleet of Amazon EC2 instances. Surges in traffic occur every weekend day at the same time and last for approximately 4 hours.

Which AWS service should the company use to ensure that there are enough instances to meet the surges in demand?

- A. AWS Lambda
- B. Amazon EventBridge (Amazon CloudWatch Events)
- C. Elastic Load Balancing (ELB)
- D. Amazon EC2 Auto Scaling

Correct Answer: D

Amazon EC2 Auto Scaling is a service that enables the company to automatically scale the number of Amazon Elastic Compute Cloud (EC2) instances in its application up or down, in response to changes in demand. The company can use Auto Scaling to ensure that there are enough instances to handle the surges in traffic that occur every weekend.

668) A company needs stateless network filtering for its VPC.
Which AWS service, tool, or feature will meet this requirement?

- A. AWS PrivateLink
- B. Security group
- C. Network access control list (ACL)
- D. AWS WAF

Correct Answer: C

Network ACLs are stateless, which means that responses to allowed inbound traffic are subject to the rules for outbound traffic (and vice versa).

669) A company needs to audit its AWS resources. The company must document any changes that have been made to the resources.

Which AWS service will meet these requirements?

- A. AWS Artifact
- B. AWS Config
- C. Amazon Inspector
- D. Amazon CloudWatch

Correct Answer: B

AWS Config is a service that allows you to track changes made to your AWS resources, and to determine the current configuration of your resources. It provides an inventory of your resources, and it continuously monitors and records configuration changes made to these resources.

AWS Config can record changes made to your resources through the AWS Management Console, AWS CLI, and SDKs, as well as by other AWS services, such as AWS CloudFormation, AWS Elastic Beanstalk, and AWS Elastic Container Service.

670) A company needs fully managed, highly reliable, and scalable file storage that is accessible over the Server Message Block (SMB) protocol.

Which AWS service will meet these requirements?

- A. Amazon S3
- B. Amazon Elastic File System (Amazon EFS)
- C. Amazon FSx for Windows File Server
- D. Amazon Elastic Block Store (Amazon EBS)

Correct Answer: C

Amazon FSx for Windows File Server is a fully managed, highly reliable, and scalable file storage service that is accessible over the Server Message Block (SMB) protocol. It provides fully managed, highly reliable, and scalable file storage that is accessible over the SMB protocol. It is designed to work with the Microsoft Windows operating system and it supports the SMB protocol which allows to access the file storage from Windows servers and clients.

671) A(n) _____ connection creates a secure tunnel between your on-site networks and your AWS networks.

- A. VPN
- B. elastic
- C. VPC
- D. paired region

Correct Answer: A

672) You want an EC2 instance in a private subnet to be accessible via inbound SSH and RDP requests from approved public IP addresses, but be unable to send outbound requests to the Internet. Which networking component will meet your requirements?

- A. bastion host
- B. customer gateway
- C. virtual gateway
- D. NAT Gateway

Correct Answer: A

Bastion hosts are EC2 instances deployed in a public subnet of your VPC that allow you to access the EC2 instances that have been deployed within a private subnet of your VPC.

<http://docs.aws.amazon.com/elasticbeanstalk/latest/dg/AWSHowTo-vpc-bh.html>

673) You want to allow an on-premises network to connect to multiple separate VPCs within your AWS network through a central network hub.

What service would you need to provide the centralized network hub between multiple VPCs and your on-premises network?

- A. VPC peering
- B. AWS VPN
- C. AWS Direct Connect
- D. AWS Transit Gateway

Correct Answer: D

The central connection point or hub between the multiple VPCs and the hybrid connection to an on-premises network will be AWS Transit Gateway. The network suggested in this scenario would certainly include VPC peering connections and either VPNs or Direct Connect, but the component that connects them all is AWS Transit Gateway.

<https://docs.aws.amazon.com/vpc/latest/tgw/what-is-transit-gateway.html>

674) Amazon Route 53 is a service that helps you _____.

- A. scale VPC and account connections
- B. register a domain name and manage it worldwide
- C. create and manage scalable blockchain networks
- D. monitor and control microservices

Correct Answer: B

675) Which VPC component is useful when you need to allow the instances in a private subnet of an Amazon VPC to connect to the Internet to perform tasks like downloading patches and updates, while still preventing any inbound connections from being initiated to these instances via the Internet?

- A. Internet Gateway
- B. NAT Gateway
- C. VPC Peering Connections
- D. Transit Gateway

Correct Answer: B

You can allow the instances in your private subnets to have outbound access to the Internet by placing a NAT gateway inside of a public subnet and then configuring a route from your private subnet to the NAT gateway. And this is useful when you need to allow the instances in your private subnet to connect to the Internet to do things like download patches and updates, while still preventing any inbound connections from being initiated to these instances via the Internet.

676) _____ is a dedicated connection between an on-premises network and AWS.

- A. AWS Transit Hub
- B. AWS Direct Connect
- C. VPC Peering
- D. AWS Site-to-Site VPN

Correct Answer: B

Your other option for connecting to a VPC from your on-premises environment is to use AWS Direct Connect, which is a dedicated connection between your network and AWS.

677) Global Accelerators reduce the latency of which type of AWS traffic? Select two choices.

- A. Traffic from the application to the end user
- B. Traffic between AWS resources within a single application
- C. Traffic from an edge location to an end user
- D. Traffic from the end user to the application

Correct Answer: AD

The ultimate aim of the AWS Global Accelerator is to get UDP and TCP traffic from your end user clients to your applications faster and quicker and more reliably, through the use of the AWS global infrastructure and specified endpoints, instead of having to traverse the public internet, which is not as reliable and carries a higher security risk.

<https://aws.amazon.com/global-accelerator/>



678) What is Amazon CloudFront?

- A. A global content delivery network
- B. A web service to schedule regular data movement
- C. A development front-end to Amazon Web Services
- D. An encrypted endpoint to upload files to the cloud

Correct Answer: A

Amazon CloudFront is a global content delivery network (CDN) service that accelerates delivery of your websites, APIs, video content or other web assets through CDN caching. It integrates with other Amazon Web Services products to give developers and businesses an easy way to accelerate content to end users with no minimum usage commitments.

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

679) Which of the following is true of public subnets?

- A. They have an internal IP address only.
- B. They have a public IP address only.
- C. They have both an internal and a public IP address.
- D. They have routeless access to an Internet gateway.

Correct Answer: C

Public subnets have both an internal and a public IP address so that they will be both in the range of the internal network and accessible from the Internet. A public subnet with a size /24 IPv4 CIDR block (example: 10.0.0.0/24). This provides 256 private IPv4 addresses. A public subnet is a subnet that's associated with a route table that has a route to an internet gateway.

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

680) All statements regarding VPC peering connections below are correct except:

- A. You can configure a peering connection between VPCs in separate regions.
- B. Peering connections are established using virtual private networks (VPN).
- C. Peering connections establish a one-to-one connection only.
- D. Peering connections are not possible between VPCs with an IP address overlap.

Correct Answer: B

VPC peering connects two separate VPCs, either in the same region or different regions. That connection is a one-to-one connection only, and cannot be established between VPCs with an IP address overlap. The connection is made over AWS infrastructure, not through a Direct Connect co-location or a virtual private network (VPN). This offers high availability, and avoids a bandwidth bottleneck.

681) If you want an additional layer of security within your VPC to allow or deny traffic at the subnet level, configure rules for your _____ .

- A. network access control list (NACL)
- B. subnet group
- C. web application firewall (WAF)
- D. security group

Correct Answer: A

Network ACLs or Access Control Lists allow you to further enhance the security of your VPC, providing you a way to control both the outgoing and incoming traffic of your subnets.

<http://docs.aws.amazon.com/AmazonVPC/latest/GettingStartedGuide/WhereGoFromHere.html>

682) Which statements regarding VPC subnets are correct? (Choose 2 answers)

- A. A route to an internet gateway means the subnet is public.
- B. A route to a virtual private gateway means that the subnet is public.
- C. A route to a NAT instance indicates VPN communication with on-premises servers.
- D. No route to an internet gateway or virtual private gateway indicates a private subnet.

Correct Answer: AD

Your VPC has an implicit router and a main route table that you can modify. Each subnet you create must be associated with a route table. Adding an internet gateway and adding a route to that IGW facilitates traffic out to the Internet for a public subnet. NAT instance and NAT gateways are provided to allow instances in private subnets to gain internet access.

http://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/VPC_Route_Tables.html

683) Each subnet in your VPC must be associated with a _____ that directs inbound and outbound traffic for the subnet's resources.

- A. route table
- B. router
- C. switch
- D. gateway table

Correct Answer: A

Every subnet in your VPC must be associated with a route table. If no explicit association between a subnet and a route table is provided, an implicit relation with the main route table is created.

Such a table is provided by default when you create a VPC and can be easily updated as well as replaced by other custom route tables.

http://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/VPC_Route_Tables.html

684) What does a local route within a route table enable?

- A. It enables communication between VPC subnets.
- B. It enables communication only within each VPC subnet, not between subnets.
- C. It enables communication between a VPC and external public IP addresses.
- D. It enables an administrator to SSH directly into any VPC resource.

Correct Answer: A

Now, by default, when your subnet's created, it will have a default route in it, and this is a local route. Let's take a look. Now, your route table will contain a destination field and also a target field. Now, the destination field is the destination address that you're trying to get to. The target essentially specifies the route to that destination. Now, within every route table that's created, there will be this local route here. Now, what this enables your subnets to do is simply talk to each other. So any subnet within your VPC is able to communicate with each other without you having to configure any routes. It's there by default. Every route table has this local route. It can't be deleted, and it simply allows all subnets within your VPC to communicate with each other.

685) Within a VPC public subnet, what function does a public IP address provide?

- A. A central target where route tables direct all VPC egress traffic to the Internet
- B. Set a specific resource's network location to support communication with the Internet
- C. Allow or restrict external traffic from entering the subnet based on a series of rules
- D. Serve as an anchor on the customer side of a VPN connection to a VPC

Correct Answer: B

A public IP address is essentially the location for any external messages to reach resources in your VPC subnet. Without it, external resources would not know how to reach you. The other choices are the services provided by internet gateways, network ACLs, and customer gateways.

<https://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/vpc-ip-addressing.html>

686) When specifying a CIDR block address for your VPC, what is the range of netmasks allowed?

- A. From a /16 netmask to a /28 netmask
- B. From a /8 netmask to a /30 netmask
- C. From a /20 netmask to a /28 netmask
- D. From a /16 netmask to a /24 netmask

Correct Answer: A

When creating a CIDR block address range, you can select a netmask from /16 to /28, which offers roughly as many as 65,000 assignable IP address within a VPC to as few as 16.

687) _____ is a networking connection between two VPCs that enables you to route traffic privately between them, even if those VPCs are in two different regions or AWS accounts.

- A. AWS CloudFront
- B. VPC Bridging
- C. VPC Peering
- D. AWS Transit Gateway

Correct Answer: C

688) _____ are deployed in an Amazon VPC to control traffic at the instance level based upon port and protocol types.

- A. Load balancers
- B. Subnets
- C. Security groups
- D. Network access control lists (NACL)

Correct Answer: C

Amazon VPC Security Group Policy: Security groups are used to control traffic at the instance level based upon port and protocol types.

689) Within AWS, what is an accurate description of a Virtual Private Cloud (VPC)?

- A. An AWS user's isolated network segment within the AWS cloud
- B. An AWS user's connection between two remote networks via the public internet
- C. An AWS user's connection between two remote networks via private AWS infrastructure
- D. an isolated segment of an AWS network that cannot receive inbound traffic from the internet

Correct Answer: A

A Virtual Private Cloud can be described as an AWS user's network segment of the AWS cloud. The other statements describe a virtual private network connection, a connection via AWS Direct Connect, and a private subnet within a VPC.

690) You can connect to a VPC in AWS from an on-premises environment by leveraging your existing Internet connection and creating a(n) _____.

- A. AWS Site-to-Site VPN
- B. VPC peering connection
- C. jump box
- D. AWS Direct Connect resource

Correct Answer: A

691) What are the use cases for Amazon ElastiCache? (Choose 3 answers)

- A. persistent data storage
- B. in-memory data storage
- C. improving read access performance
- D. caches using secure, network-attached RAM

Correct Answer: BCD

ElastiCache should never be used to store your only version of data records, since a cache is designed to be a temporary data store. So when data persistence is necessary, such as when we are working with primary data records, or when we need write performance rather than read performance, a persistent data store should be used instead of an ElastiCache.

692) Amazon QLDB is a _____ database.

- A. relational
- B. document
- C. ledger
- D. graph

Correct Answer: C

Amazon QLDB is a fully managed and serverless database service, which has been designed as a ledger database.

693) In Amazon RDS, what is the purpose of Multi-AZ deployment?

- A. to create high availability and data redundancy
- B. to create a database with highly configurable options
- C. to prevent users from outside your VPC security group from accessing your database
- D. to enable automatic backups

Correct Answer: A

If high availability and resiliency are of importance when it comes to your database, then you might want to consider a feature known as Multi-AZ, which stands for multi-availability zones. When Multi-AZ is configured, a secondary RDS instance is deployed within a different availability zone within the same region as the primary instance. The primary purpose of the second instance is to provide a failover option for your primary RDS instance. When we have a Multi-AZ deployment, it will create another standby instance in a different availability zone to create high availability and data redundancy.

694) Which of the following AWS databases is a managed NoSQL graph database?

- A. Amazon Neptune
- B. Amazon DynamoDB
- C. Amazon DocumentDB
- D. Amazon Keyspaces

Correct Answer: A

The AWS managed NoSQL graph database is Amazon Neptune.

Graph databases are composed of three elements, vertices, edges, and properties.

Vertices, also called nodes, are objects such as people or artifacts. Each node in a graph database has a unique identifier expressed in key-value pairs.

The singular of vertices is vertex. A vertex can represent data such as integers, string, people, locations, and buildings.

Edges represent the connection--or relationship--between two objects. Each edge is defined by a unique identifier that provides details about a starting or ending node along with a set of properties.

The vertices and edges can each have properties associated with them. This allows a graph database to depict complex relationships between otherwise unrelated data.



695) Which of the following is an AWS managed service providing relational databases with a variety of database engines?

- A. Amazon QLDB
- B. Amazon DocumentDB
- C. Amazon ElastiCache
- D. Amazon RDS

Correct Answer: D

They fall into two primary categories, relational and NoSQL databases. The Amazon Relational Database Service is the managed service providing relational databases. The engines include Amazon Aurora, MySQL, MariaDB, Postgres, Microsoft SQL Server, and Oracle.

696) _____ allows you to set up your secure data lake by identifying existing data sources that you want to move into your data lake, and then crawling, cataloging, and preparing all that data for you to perform analytics on.

- A. AWS Lake Formation
- B. Amazon Athena
- C. Amazon OpenSearch Service
- D. AWS Glue

Correct Answer: A

We can use the AWS Lake Formation service, which promises to make setting up your secure data lake take only a matter of days, instead of weeks or months. It does this by identifying existing data sources within Amazon S3, relational databases, and NoSQL databases that you want to move into your data lake. It then will crawl and catalog and prepare all that data for you to perform analytics on.

697) Which of the following statements about data lakes and data warehouses is true?

- A. A data warehouse is a formless blob of information.
- B. A data warehouse is a specialized tool that allows you to perform analysis on a portion of data from a data lake.
- C. Generally, a data lake is a subset of the data from a data warehouse with a specialized purpose.
- D. A data lake is an optimized database dealing with normalized, transformed, and cleaned-up versions of the data from a data warehouse.

Correct Answer: B

A data lake is a formless blob of information. It is a pool of knowledge where we try to capture any relevant data from our business so that we can perform analytics on it. A data warehouse is a specialized tool that allows you to perform analysis on a portion of that data, so you can make meaningful decisions from it. Generally, it is a subset of the data from the data lake with a specialized purpose. Your data warehouse is an optimized database that is dealing with normalized, transformed, and cleaned-up versions of the data from the data lake.

698) What database is a Key-Value store?

- A. Amazon Redshift
- B. Amazon RDS
- C. Amazon QLDB
- D. DynamoDB

Correct Answer: D

The AWS managed NoSQL database that is a Key-Value store is DynamoDB. Key-Value stores are designed for storing, retrieving, and managing associative arrays and are well suited for working with large amounts of data.

699) Amazon Keyspaces is compatible with _____.

- A. MongoDB
- B. MySQL
- C. Firebase
- D. Apache Cassandra

Correct Answer: D

Keyspaces is a serverless, fully-managed service designed to be highly scalable, highly available, and, importantly, compatible with Apache Cassandra, meaning you can use all the same tools and code as you do normally with your existing Apache Cassandra databases.

700) Which relational database service is an iteration of MySQL and only available on AWS?

- A. MariaDB
- B. Postgres
- C. Aurora
- D. Redshift

Correct Answer: C

Amazon Aurora is an iteration of MySQL and offers faster processing. It is a cloud-native database service only available on AWS.

701) Which Amazon RDS database engine deploys a database cluster across multiple availability zones, to serve as the primary instance's storage layer?

- A. PostgreSQL
- B. MySQL
- C. Oracle
- D. Aurora

Correct Answer: D

When you create an Amazon Aurora instance, the Aurora service also deploys a cloud-native database cluster, and the Aurora instances will use this database cluster as the underlying data store. The database cluster spans two or more availability zones by default, with each availability zone having a copy of the database cluster data. And each cluster has one primary instance which performs all of the data modifications to the cluster volume and supports read and write operations.

702) What does Amazon RDS perform?

- A. It offers a managed relational database service.
- B. It offers a cloud service that can host user-managed relational databases.
- C. It offers a managed data warehouse service.
- D. It offers a managed non-relational database service.

Correct Answer: A

Amazon RDS manages the work involved in setting up a relational database: from provisioning the infrastructure capacity you request to installing the database software. The other choices briefly summarize Amazon EC2, Amazon Redshift, and Amazon DynamoDB.

<http://aws.amazon.com/rds/faqs/#1>

703) What are two types of databases offered by AWS?

- A. Relational and Non-relational (NoSQL)
- B. Object and Block
- C. Persistent and In-memory
- D. Stateful and Stateless

Correct Answer: A

Database services allow you to choose from a range of database options to power your applications. These include traditional relational databases or relational database management systems, RDBMS, as well as non-relational databases, often called NO SQL, not only SQL databases.

704) Which AWS service is a fully managed, serverless, NoSQL database that has been built to run high-performance applications at any scale?

- A. Amazon S3
- B. Amazon RDS Proxy
- C. Amazon Aurora
- D. Amazon DynamoDB

Correct Answer: D

DynamoDB is a fully managed, serverless, NoSQL database that has been built to run high-performance applications at any scale.

705) In which two general families can you classify all AWS database services?

- A. Relational and non-relational
- B. Structured and unstructured
- C. Persistent and in-memory
- D. Managed and unmanaged

Correct Answer: A

The two general families are relational and non-relational and non-relational. Relational includes Amazon RDS and its various database engine options, as well as Amazon Redshift. Non-relational includes DynamoDB, ElastiCache, and Neptune, among others.

706) What are the advantages of hosting databases on Amazon RDS instead of Amazon EC2?
(Choose 3 answers)

- A. Managed failover in the event of DB failure
- B. Automated database patching
- C. Managed hardware lifecycle
- D. Automated DB backup

Correct Answer: ABD

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

707) Amazon ElastiCache allows you to retrieve information from _____.

- A. different web servers in the cloud
- B. NoSQL databases
- C. relational databases
- D. in-memory data stores

Correct Answer: D

Amazon ElastiCache is a service that makes it easy to deploy, operate, and scale open-source, in-memory data stores in the cloud. This service improves performance through caching, where web applications allow you to retrieve information from fast, managed, in-memory data stores instead of relying entirely on slower disk-based solutions.

708) Which of the following AWS databases stores, queries, and indexes JSON data?

- A. Amazon Redshift
- B. Amazon DocumentDB
- C. Amazon RDS
- D. Amazon DynamoDB

Correct Answer: B

Amazon DocumentDB is a document database. Document databases store semi-structured data and the data structure is embedded in the document, itself. As a document database, Amazon DocumentDB is designed to store, query, and index JSON data.

709) Amazon Redshift is a fast, fully-managed, _____-scale data warehouse.

- A. megabyte
- B. gigabyte
- C. terabyte
- D. petabyte

Correct Answer: D

Amazon Redshift is a fast, fully-managed, petabyte-scale data warehouse.

710) Amazon Redshift operates as a _____ database management system.

- A. NoSQL
- B. relational
- C. object
- D. graph

Correct Answer: B

Redshift operates as a relational database management system, and therefore is compatible with other RDBMS applications.

711) Where is an object stored in Amazon S3?

- A. In a vault
- B. In a bucket
- C. In an archive
- D. In a volume

Correct Answer: B

Every object in Amazon S3 is stored in a bucket. You must create a bucket before you can store data in Amazon S3.

<http://docs.aws.amazon.com/AmazonS3/latest/gsg/CreatingABucket.html>

712) What is the potential size range for individual objects stored in Amazon S3?

- A. 1 byte to 500 MB
- B. 0 bytes to 5 TB
- C. 100 MB to 5 GB
- D. 1 byte to 5 TB

Correct Answer: B

The total volume of data and number of objects you can store are unlimited. Individual Amazon S3 objects can range in size from 0 bytes to 5 TB.

<https://aws.amazon.com/s3/faqs/>

713) Which Amazon S3 storage class offers cost savings for data with unknown or changing access patterns?

- A. S3 One Zone - Infrequent Access
- B. S3 Glacier
- C. S3 Standard
- D. S3 Intelligent - Tiering

Correct Answer: D

S3 Intelligent - Tiering provides automatic cost savings for data with unknown or changing access patterns.

714) Which of the following storage solutions is best for applications that scale across multiple instances, allowing for parallel access of data?

- A. Amazon Simple Storage Service (S3)
- B. Amazon Elastic Block Store (EBS)
- C. Amazon Elastic File System (EFS)
- D. Amazon Blob Storage (BS)

Correct Answer: C

Amazon Elastic File System, or EFS, is considered file-level storage and is also optimized for low-latency access, but unlike EBS, it supports access by multiple EC2 instances at once. As the file system can be accessed by multiple instances, it makes it a very good storage option for applications that scale across multiple instances, allowing for parallel access of data.

With EBS Multi-Attach now available as a feature, one may think this is the best choice -- but its compatibility is limited

715) Which statement best describe the AWS Snow Family?

- A. Fully managed on-premises servers that extend AWS infrastructure, services, APIs, and tools to customer premises
- B. Physical pieces of hardware that are used to transfer data into AWS from the edge of or beyond the Cloud
- C. Cloud-backed storage volumes that you can mount as Internet Small Computer System Interface (iSCSI) devices from your on-premises application servers.
- D. A group of computing devices that process cryptographic operations and provides secure storage for cryptographic keys.

Correct Answer: B

The AWS Snowcone is a part of the AWS snow family of devices. These devices are physical pieces of hardware that are used to transfer data into AWS from the edge of or beyond the Cloud, such as your data center, but they can also be used to transfer data out of AWS too--for example, from Amazon S3 back to your premises.

716) Which of the following is an advantage of Amazon S3 storage over EBS store volumes for the storage of archived data?

- A. It is cost-effective for storing data longterm
- B. It is scalable with a single API call
- C. It provides high IOPs
- D. It is highly persistent

Correct Answer: A

As compared to EBS store volumes, Amazon S3 storage is the cheapest option for the storage of files that may not be accessed for long periods of time. For example, data stored in the S3 Glacier Flexible Retrieval (Formerly S3 Glacier) storage class can be stored for \$0.004 per GB per month and can be used for long-term backups and archives with retrieval option from 1 minute to 12 hours.

EBS store volumes are highly scalable, provide low latency of up to 16,000 IOPS for General Purpose SSDs and up to 256,000 IOPS for the new Provisioned IOPS SSD IOPs, and are highly persistent. EBS store volumes are best suited to situations that require high availability and performance, not archival storage.

<https://aws.amazon.com/s3/pricing/>

717) Which of the following storage solutions is best for situations where files are written once and then accessed many times?

- A. Amazon Simple Storage Service (S3)
- B. Amazon Elastic Block Store (EBS)
- C. Amazon Elastic File Storage (EFS)
- D. Amazon FSx

Correct Answer: A

Amazon Simple Storage Service, or S3, is an object storage solution. This type of storage is best for situations where files are written once and then accessed many times.

718) Which AWS storage service is primarily a data-backup service?

- A. Amazon S3
- B. Amazon S3 Glacier
- C. Amazon EBS
- D. Amazon EFS

Correct Answer: B

Glacier, on the other hand, is primarily a data-backup service. It is really, really cheap to store your data on Glacier, but it's harder, slower, and more expensive to upload it or download it.

719) Amazon S3 allows you to set up _____ policies to put infrequently accessed data into a cheaper storage tier, to help deal with the cost of the ever-increasing data burden.

- A. data movement
- B. lifecycle
- C. storage
- D. tier

Correct Answer: B

One benefit of using S3 is that we can set up lifecycle policies to help deal with the cost of the ever-increasing data burden. This allows us to put infrequently accessed data into a cheaper storage tier, and even to eventually put it into Glacier (the deep archival service) when we are fairly certain that that data isn't going to be used for a long while.

720) An Amazon EC2 instance store provides temporary block-level storage for your instance. Ephemeral storage is ideal for _____.

- A. persistent data
- B. storing critical system files
- C. high-performance storage of user files
- D. non-persistent data

Correct Answer: D

An Amazon EC2 Instance Store provides temporary block-level storage for your instance. An instance store is ideal for temporary storage of information that changes frequently, such as buffers, caches, scratch data, and other temporary content. Ephemeral storage is ideal for non-persistent data.

<http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/InstanceStorage.html>

721) Which AWS service is an object-based serverless storage system that is able to handle a nearly unlimited amount of data?

- A. Amazon DynamoDB
- B. Amazon EC2
- C. Amazon S3
- D. Amazon ECS

Correct Answer: C

Amazon S3 is an object-based serverless storage system that is able to handle a nearly unlimited amount of data.

722) Which of the following lists correctly names the AWS Snow family of devices, in order from smallest to largest?

- A. Snowcone, Snowball, Snowmobile
- B. Snowball, Snowcone, Snowmobile
- C. Snowmobile, Snowball, Snowcone
- D. Snowball, Snowmobile, Snowcone

Correct Answer: A

As you can see from this table, both from a physical and capacity perspective, the Snowcone is the smallest, followed by the Snowball and finally the Snowmobile.

723) Which of the following is a use case for EBS (Elastic Block Store)?

- A. Storing data that requires frequent updates.
- B. Saving static images associated with a website.
- C. Sharing storage for applications across multiple instances.
- D. Storing information in a table that can be queried.

Correct Answer: A

EBS must be attached to an EC2 Instance. EBS works particularly well as sort of a backend for a web server. EBS is useful as storage for whatever application you're running on, things like locally keeping track of the state of the game or keeping track of how many users have connected to the server.

724) Where does Amazon EFS store its data?

- A. A bucket
- B. A volume
- C. A cache
- D. A file system

Correct Answer: D

Amazon EFS is similar to on-premise network attached storage, in contrast to EBS and EC2 instance store, which offer virtual directly attached storage, and Amazon S3, which offers internet accessible object storage with a flat structure.

<https://docs.aws.amazon.com/efs/latest/ug/whatisefs.html>

725) In which of the following scenarios will data be lost from an EC2 instance store? (Choose 2 answers)

- A. The instance stops
- B. Disk drive failure
- C. The instance reboots
- D. Network failure

Correct Answer: AB

<http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/InstanceStorage.html>

726) Which of the following should you use as a backup solution in case an S3 bucket storage object is accidentally deleted?

- A. Multi-Factor Authentication Delete
- B. Lifecycle Policies
- C. Versioning
- D. Bucket Policies

Correct Answer: C

Enabling versioning on an S3 bucket ensures you can recover from misuse of an object or accidental deletion, and revert back to an older version of the same data object.

Multi-Factor Authentication Delete ensures that a user has to enter a 6 digit MFA code to delete an object, which prevents accidental deletion due to human error.

Lifecycle Policies allow you to automatically manage and move data between classes, allowing specific data to be relocated based on compliance and governance controls you might have in place.

Bucket Policies are JSON policies assigned to individual buckets. These Bucket Policies can also define who or what has access to that bucket's contents, but they do not control versioning of objects within buckets.

727) Which of the following is an appropriate use case for AWS Snowball?

- A. Data retrieval will take longer than a week using your existing connection method.
- B. You want to store a few data files for deletion within one day.
- C. You want to incur zero cost for data transfer services.
- D. Data transfer must occur within one hour.

Correct Answer: A

AWS Snowball is appropriate for cases in which it would take over one week to retrieve data using your existing connection. It is not cost-free for data transfer and it is not an appropriate use case for quick transfers of data, and it is not optimal for small amounts of data that will be deleted within a short amount of time. That data could be stored on an external drive or in an S3 bucket.

728) Which statement about EC2 instance store volumes is incorrect?

- A. The storage cost is included in the EC2 instance price.
- B. Instance store volumes offer very high I/O speed.
- C. The instance store volumes reside on the same hardware as host instance.
- D. They are available for all instance types.

Correct Answer: D

Even though EC2 instance store volumes are part of the EC2 service itself, they are not available for all instance types. To see which instance types offer it, be sure to review the documentation closely.

<https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/InstanceStorage.html>

729) The AWS Snow family consists of a range of _____ that are all designed to enable you to transfer data into AWS from the edge or beyond the cloud.

- A. physical hardware devices
- B. cloud compute instances
- C. virtual servers
- D. managed relational databases

Correct Answer: A

The Snow family consists of a range of physical hardware devices that are all designed to enable you to transfer data into AWS from the edge or beyond the cloud, such as your data center, but they can also be used to transfer data out of AWS too, for example, from Amazon S3 back to your data center.

730) If you are uncertain how often you will access and modify data, why is it cost-effective to use Amazon EFS Standard storage class instead of the Elastic File System Infrequent Access storage class?

- A. EFS Infrequent Access performs reads and writes slower than EFS Standard.
- B. The storage cost per GB is cheaper for EFS Infrequent Access than for EFS Standard.
- C. Elastic File Storage Infrequent Access charges for each read and write operation.
- D. The more data you store using EFS Standard, the greater the savings compared to EFS Infrequent Access.

Correct Answer: C

If you are uncertain how frequently you will access data in your Elastic File System, it is best to use EFS rather than EFS-IA because the EFS Infrequent Access class associates a charge with each read and write you make to the storage class.

731) What is the difference between Amazon Elastic Container Service (ECS) and Amazon Elastic Container Registry (ECR)?

- A. ECR stores Docker images to be deployed by ECS.
- B. ECR is a failover and backup service for ECS clusters.
- C. ECR is a central data storage service for stateless ECS clusters.
- D. ECR manages EC2 instances and Docker containers deployed by ECS.

Correct Answer: A

Elastic Container Registry is a secure location to store and manage Docker images. It is a fully managed service. Elastic Container Service can pull images from registries within ECR and deploy them within ECS clusters.

732) In which case does AWS recommend selecting an Application Load Balancer?

- A. When an application requires load balancing of HTTP requests
- B. When an application requires load balancing of TCP or UDP protocol traffic
- C. When an application requires the use of a third-party virtual appliance
- D. Application Load Balancers are not recommended because the related network is being retired

Correct Answer: A

Elastic Load Balancing (ELB) supports four types of load balancers. You can select the appropriate load balancer based on your application needs. If you need to load balance HTTP requests, we recommend you use the Application Load Balancer (ALB). For network/transport protocols (layer4 – TCP, UDP) load balancing, and for extreme performance/low latency applications we recommend using Network Load Balancer. If your application is built within the Amazon Elastic Compute Cloud (Amazon EC2) Classic network, you should use Classic Load Balancer. If you need to deploy and run third-party virtual appliances, you can use Gateway Load Balancer.

<https://aws.amazon.com/elasticloadbalancing/faqs/?nc=sn&loc=5>

733) How does AWS Batch simplify the batch computing process?

- A. It removes the need for expensive hardware, and time-consuming administrative and process management requirements.
- B. It manages all batch computing environments.
- C. It applies a stream processing model to batch computing.
- D. It combines the processing power of all EC2 instances deployed in an existing VPC network.

Correct Answer: A

As a fully managed service, AWS Batch enables developers, scientists, and engineers to run batch computing workloads of any scale. AWS Batch automatically provisions compute resources and optimizes the workload distribution based on the quantity and scale of the workloads. With AWS Batch, there is no need to install or manage batch computing software, which allows you to focus on analyzing results and solving problems. AWS Batch reduces operational complexities, saves time, and reduces costs, which makes it easy for developers, scientists, and engineers to run their batch jobs in the AWS Cloud.

AWS Batch does not manage all batch computing environments. Depending on the type of compute environment you select, you may manage the infrastructure. It does not apply a stream processing model, and it does not combine the power of all instances deployed in a VPC network.

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

734) Amazon EC2 provides virtual computing environments known as _____.

- A. instances
- B. containers
- C. clusters
- D. microservices

Correct Answer: A

Amazon EC2 provides virtual computing environments known as instances.

When you launch an instance, the *instance type* that you specify determines the hardware of the host computer used for your instance. Each instance type offers different compute, memory, and storage capabilities and are grouped in instance families based on these capabilities. Select an instance type based on the requirements of the application or software that you plan to run on your instance.

<http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/concepts.html>

735) Amazon EC2 Auto Scaling offers what service?

- A. It manages the vertical scaling of EC2 instances
- B. It manages the horizontal scaling of EC2 instances
- C. It manages the software patching of EC2 instances
- D. It manages the rightsizing of EC2 instances

Correct Answer: C

Auto Scaling is a service that allows users to automatically scale the EC2 resources in or out, or horizontally, according to the conditions or by manual intervention. It is a seamless process to scale the EC2 instances. It does not scale instances vertically, which would involve changing the size of an existing instance.

<https://docs.aws.amazon.com/autoscaling/ec2/userguide/what-is-amazon-ec2-auto-scaling.html>

736) What is the purpose of the Elastic Load Balancing service?

- A. Deny incoming or outgoing requests that fail to meet a set of provided rules
- B. Transmit network messages outside of the VPC without the use of the public internet
- C. Improve system fault tolerance by distributing traffic across multiple AWS resources
- D. Connect external clients to the correct resource based upon the assigned domain or subdomain

Correct Answer: C

Elastic Load Balancing is a network service that distributes application traffic across multiple EC2 instances and availability zones. It provides network fault tolerance by automatically scaling up or down based on network traffic requirements.

<https://docs.aws.amazon.com/elasticloadbalancing/latest/application/introduction.html>

737) Which Amazon service allows you to run, stop, and manage Docker containers on a cluster of Amazon EC2 instances?

- A. Amazon Elastic Kubernetes Service (EKS)
- B. Amazon Elastic Container Registry (ECR)
- C. Amazon Elastic Container Service (ECS)
- D. AWS ParallelCluster

Correct Answer: C

Amazon ECS allows you to launch and stop container-based applications with API calls and also allows you to get the state of your cluster from a centralized service. You can use Amazon ECS to schedule the placement of containers across your cluster based on your resource needs, isolation policies, and availability requirements.

<http://docs.aws.amazon.com/AmazonECS/latest/developerguide/Welcome.html>

738) An AWS Lambda function _____ is an operation from an event source that causes the function to invoke.

- A. trigger
- B. event
- C. log
- D. stream

Correct Answer: A

A trigger is essentially an operation from an event source that causes the function to invoke, and so essentially is triggering that function.

739) What compute service does AWS Elastic Beanstalk provide?

- A. To deploy small units of user-provided code as functions
- B. To deploy and manage containers on clusters with a variety of compute options
- C. To deploy applications without managing, load balancing, or scaling the infrastructure
- D. To host AWS-managed hardware in an on-premises environment

Correct Answer: C

With Elastic Beanstalk, you can quickly deploy and manage applications in the AWS Cloud without having to learn about the infrastructure that runs those applications. Elastic Beanstalk reduces management complexity without restricting choice or control. You simply upload your application, and Elastic Beanstalk automatically handles the details of capacity provisioning, load balancing, scaling, and application health monitoring.

<https://docs.aws.amazon.com/elasticbeanstalk/latest/dg/Welcome.html>

740) What is Amazon Elastic Kubernetes Service (EKS)?

- A. EKS deploys small units of user-provided code as functions
- B. EKS deploys web applications on virtual servers without the need to manage, load balance, or scale the infrastructure
- C. EKS provides infrastructure-as-a-service on AWS-hosted virtual servers
- D. EKS is a managed service that runs Kubernetes in the AWS cloud

Correct Answer: D

Amazon EKS is a managed Kubernetes service to run Kubernetes in the AWS cloud and on-premises data centers. In the cloud, Amazon EKS automatically manages the availability and scalability of the Kubernetes control plane nodes responsible for scheduling containers, managing application availability, storing cluster data, and other key tasks. With Amazon EKS, you can take advantage of all the performance, scale, reliability, and availability of AWS infrastructure, as well as integrations with AWS networking and security services. On-premises, EKS provides a consistent, fully-supported Kubernetes solution with integrated tooling and simple deployment to AWS Outposts, virtual machines, or bare metal servers.

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

741) What is a common use case for Amazon Lightsail?

- A. to host simple websites, blogs or small applications
- B. to process individual steps in a process automatically based on changes in your system status
- C. to process large compute jobs with minimal administrative requirements
- D. to manage scaling of Amazon EC2 instances

Correct Answer: A

With its simplicity and small scale uses, Amazon Lightsail is commonly used to host simple websites, small applications, and blogs. You can run multiple Lightsail instances together, allowing them to communicate and it's even possible, if required, to connect it to other AWS resources and to your existing VPC running within AWS via a peering connection.

<https://lightsail.aws.amazon.com/ls/docs/getting-started/article/what-is-amazon-lightsail>

742) Which AWS service enables AWS users to run containers on Amazon ECS without provisioning and managing the host EC2 instances?

- A. AWS Fargate
- B. AWS Auto Scaling
- C. AWS OpsWorks Chef
- D. AWS Systems Manager

Correct Answer: A

When using the Fargate launch type with tasks within your cluster, Amazon ECS manages your cluster resources.

743) In which case does AWS recommend selecting a Network Load Balancer?

- A. When an application requires load balancing of HTTP requests
- B. When an application requires load balancing of TCP or UDP protocol traffic
- C. When an application requires the use of a third-party virtual appliance
- D. Network Load Balancers are not recommended because AWS retired the related network

Correct Answer: B

Elastic Load Balancing (ELB) supports four types of load balancers. You can select the appropriate load balancer based on your application needs. If you need to load balance HTTP requests, we recommend you use the Application Load Balancer (ALB). For network/transport protocols (layer4 – TCP, UDP) load balancing, and for extreme performance/low latency applications we recommend using Network Load Balancer. If your application is built within the Amazon Elastic Compute Cloud (Amazon EC2) Classic network, you should use Classic Load Balancer. If you need to deploy and run third-party virtual appliances, you can use Gateway Load Balancer.

<https://aws.amazon.com/elasticloadbalancing/faqs/?nc=sn&loc=5>

744) Which statement best describes an Amazon Machine Image (AMI)?

- A. A temporary virtual machine created during horizontal scaling
- B. A virtual machine backup file on a local server hard drive
- C. A preconfigured template for your EC2 instances
- D. A VMware configuration file for any network deployment

Correct Answer: C

Amazon EC2 provides Amazon Machine Images (AMIs), which are preconfigured templates for your instances.

<https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/AMIs.html>

745) What service does Elastic Container Repository offer?

- A. It stores Docker images
- B. It stores application code
- C. It stores Docker container data
- D. It manages encryption keys for Docker application data

Correct Answer: A

Amazon ECR supports private Docker repositories with resource-based permissions using AWS IAM so that specific users or Amazon EC2 instances can access repositories and images. Developers can use the Docker CLI to push, pull, and manage images.

<https://docs.aws.amazon.com/AmazonECR/latest/userguide/what-is-ecr.html>

746) Which AWS compute service allows customers to quickly spin up and shut down cloud servers they can manage at the operating system level?

- A. Amazon EC2
- B. Amazon Elastic Container Services (ECS)
- C. Elastic Load Balancer
- D. AWS Elastic Beanstalk

Correct Answer: A

EC2 stands for Elastic Compute Cloud, and is the service that lets you quickly spin up and shut down the cloud servers that are most like your on-premise servers.

747) Which service allows you to implement and deploy small computing units by delivering simple functions?

- A. Amazon EC2
- B. AWS Lambda
- C. Amazon ECS
- D. Amazon Lightsail

Correct Answer: B

AWS Lambda is a serverless, event-driven compute service that lets you run code for virtually any type of application or backend service without provisioning or managing servers. You can trigger Lambda from over 200 AWS services and software as a service (SaaS) applications, and only pay for what you use. AWS Lambda allows you to implement and deploy small computing units by delivering simple functions.

Lightsail provides developers compute, storage, and networking capacity and capabilities to deploy and manage websites and web applications in the cloud. Lightsail includes everything you need to launch your project quickly – virtual machines, containers, databases, CDN, load balancers, DNS management etc. This is different than Lambda because Lightsail deals with only hosting web applications rather than small, serverless functions.

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

748) _____ are a fundamental concept in Amazon CloudWatch; they represent a time-ordered set of data, and each AWS service sends these to CloudWatch.

- A. Namespaces
- B. Statistics
- C. Metrics
- D. Dimensions

Correct Answer: C

Metrics are the fundamental concept in CloudWatch. A metric represents a time-ordered set of data points that are published to CloudWatch. AWS services send metrics to CloudWatch, and you can send your own custom metrics to CloudWatch. You can add the data points in any order, and at any rate you choose. You can retrieve statistics about those data points as an ordered set of time-series data. Metrics are uniquely defined by a name, a namespace, and one or more dimensions.

http://docs.aws.amazon.com/AmazonCloudWatch/latest/monitoring/cloudwatch_concepts.html

749) What are the benefits of CloudTrail integration with CloudWatch Logs?

- A. It enables you to receive SWF notifications of API activity captured by CloudTrail.
- B. It enables you to receive SNS notifications of API activity captured by CloudTrail.
- C. It enables you to receive SES notifications of API activity captured by CloudTrail.
- D. It enables you to receive SQS notifications of API activity captured by CloudTrail.

Correct Answer: B

CloudTrail integration enables you to receive SNS notifications of API activity captured by CloudTrail. For example, you can create CloudWatch alarms to monitor API calls that create, modify and delete Security Groups and Network ACLs.

<http://aws.amazon.com/cloudtrail/faqs/>

750) In Amazon CloudTrail, each API call represents _____.

- A. programmatic requests initiated using an SDK
- B. a new event related to an object
- C. a call made using the AWS command-line interface
- D. requests to delete objects

Correct Answer: B

Each API call represents a new event within a log file related to a particular object and its log file, programmatic requests, AWS command-line interface calls, and requests to delete objects are types of new events.

<https://docs.aws.amazon.com/AmazonS3/latest/userguide/cloudtrail-request-identification.html>

751) Which statement is true about AWS Config and regions?

- A. AWS Config is a region-specific service, meaning it has to be configured in every region you wish to use it.
- B. AWS Config is a global service, once enabled it will work across all supported regions automatically.
- C. AWS Config can only be used in one region at a time.
- D. AWS Config is not enabled at a regional level.

Correct Answer: A

AWS Config is region-specific, meaning that if you have resources in multiple regions, then you will have to configure AWS Config for each Region you want to record resource changes. When doing so, you can specify different options for each Region. For example, you could configure Config in one Region to record all supported resources across all services within that Region, and add a predefined AWS Managed Config rule that will check if EBS volumes are encrypted. In another region, you could select only to record a specific type of resource, such as *Security Groups* with no predefined rules allocated.

<http://docs.aws.amazon.com/config/latest/developerguide/gs-console.html>

752) Which Amazon CloudWatch feature allows CloudWatch to implement machine learning algorithms against your metric data to help detect any activity that sits outside of the normal baseline parameters?

- A. CloudWatch Alarms
- B. CloudWatch Anomaly Detection
- C. Amazon EventBridge
- D. CloudWatch Logs

Correct Answer: B

CloudWatch metrics also allow you to enable a feature known as anomaly detection. This allows CloudWatch to implement machine learning algorithms against your metric data to help detect any activity that sits outside of the normal baseline parameters that are generally expected.

753) Which Amazon CloudWatch feature provides a means of connecting your own applications to a variety of different targets, allowing you to implement a level of real-time monitoring?

- A. CloudWatch Alarms
- B. CloudWatch Anomaly Detection
- C. Amazon EventBridge
- D. CloudWatch Logs

Correct Answer: C

CloudWatch EventBridge provides a means of connecting your own applications to a variety of different targets, typically AWS services, to allow you to implement a level of real-time monitoring, allowing you to respond to events that occur in your application as they happen.

754) Which of the following tasks can AWS Config help you accomplish?

- A. Manage and maintain compliance
- B. Track resource metrics
- C. Automatically delete non-compliant resources
- D. Log all API calls to your resources

Correct Answer: A

755) Where does AWS Config record resource change information and relevant metadata related to the change?

- A. In a Configuration Item
- B. In an AWS Config rule
- C. In a CloudTrail log
- D. In a Conformance Pack

Correct Answer: A

AWS Config can capture resource changes. So any change to a resource supported by Config can be recorded, which will record what change along with other useful metadata all held within a file known as a configuration item, a CI.

It can act as a resource inventory. AWS Config can discover supported resources running within your environment, allowing you to see data about that resource type.

756) Which CloudWatch feature allows you to derive additional information and create visualizations from resources such as CloudWatch logs, ECS clusters, or Lambda functions?

- A. CloudWatch Insights
- B. CloudWatch Logs
- C. CloudWatch EventBridge
- D. CloudWatch Anomaly Detection

Correct Answer: A

757) Amazon CloudWatch _____ allow you to implement automatic actions based on specific thresholds that you can configure related to each metric.

- A. anomaly detections
- B. rules
- C. alarms
- D. events

Correct Answer: C

Amazon CloudWatch alarms tightly integrate with the metrics that I just discussed and they allow you to implement automatic actions based on specific thresholds that you can configure related to each metric.

758) Which three AWS Config components use configuration items? (Choose 3 answers)

- A. Configuration history
- B. Configuration snapshots
- C. Configuration streams
- D. Configuration recorder

Correct Answer: BC

Configuration items are used by other features and components of AWS Config, such as:

- Configuration History - Configuration items are used to look up all changes that have been made to a resource
- Configuration Streams - Configuration items are sent to an SNS Topic to enable analysis of the data
- Configuration Snapshots - Configuration items are used to create a point in time snapshot of all supported resources

759) New CloudTrail log files are typically created every _____.

- A. minute
- B. five minutes
- C. ten minutes
- D. sixty minutes

Correct Answer: C

For greater management, new log files are typically created every 5 minutes which are then delivered and stored within an S3 Bucket that is defined by you during your CloudTrail configuration. This allows you to easily go back and review the history of all API requests. There is also an option to have these logs delivered to a CloudWatch Logs log file as well.

760) What Amazon CloudWatch feature offers visual representations of performance metrics and alarms related to your AWS resources?

- A. CloudWatch Dashboards
- B. CloudWatch Anomaly Detection
- C. CloudWatch EventBridge
- D. CloudWatch Alarms

Correct Answer: A

761) What is the primary function of Amazon CloudWatch?

- A. To notify you regarding configuration changes to your AWS resources
- B. To monitor your AWS resources' performance against specific metrics and thresholds
- C. To track and record API requests made in AWS
- D. To provide feedback on your AWS cloud environment's configuration based on best practices

Correct Answer: B

The primary function of Amazon CloudWatch is to provide a means of monitoring the resources that you're running within AWS via a series of metrics, which are individual to each service that you are using. This allows you to quickly react to events, and diagnose, and dynamically adjust any availability or scalability issue that you might be experiencing.

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

762) What is the primary function of AWS CloudTrail?

- A. To track and record API requests made in AWS
- B. To notify you regarding configuration changes to your AWS resources
- C. To monitor resource performance against specific service thresholds
- D. To provide feedback on your AWS cloud environment's configuration based on best practices

Correct Answer: A

CloudTrail is a service that has a primary function to record and track all AWS API requests made. These API calls can be programmatic requests initiated from a user using an SDK, the AWS Command Line Interface, from within the AWS management console, or even from a request made by another AWS service.

763) Migration to the cloud presents numerous potential benefits, but it will not solve all of a business's challenges. Which of the following is not an immediate benefit provided by the cloud?

- A. Improved application performance
- B. Utility-based metering
- C. On-demand resourcing
- D. Economy of scale

Correct Answer: A

Economy of scale, on-demand resourcing, and utility-based metering are each available in the public cloud, but improved application performance is not guaranteed by hosting one's services in the cloud. Optimization, experimentation, and innovation may be easier to implement, depending on your application's requirements, but this still requires a dedicated team to review and redesign an application to gain the true benefits of the cloud.

764) The _____ cloud service model offers the greatest amount of user customization and control, but requires the greatest amount of user administration including the operating system, but not physical hardware.

- A. Infrastructure-as-a-Service (IaaS)
- B. Platform-as-a-Service (PaaS)
- C. Software-as-a-Service (SaaS)
- D. Traditional on-premise

Correct Answer: A

The IaaS cloud service model allows the highest level of customization and management, where users can architect their own portion of the cloud within a virtual network, and then deploy virtual machines which they configure from the operating system layer and above.

765) Moving to the cloud will present many new issues for businesses to consider and anticipate as they migrate from an on-premises environment. Which of the following below is not an issue specific to cloud computing?

- A. Potential increased dependency on the public internet
- B. Limitations and constraints in platform service level agreements
- C. Potential increased risk of cyberattack
- D. Restoring service in the event of a server failure

Correct Answer: D

766) What benefit of cloud computing allows you to increase or decrease the power or quantity of resources at any time, without extensive installation or physical processes of provisioning?

- A. Scalability
- B. Economy of Scale
- C. High availability
- D. Utility-based metering

Correct Answer: A

Scalability means you can increase or decrease the power of provisioned resource, such as adding or removing more CPU or memory to a virtual machine. This is an example of scaling vertically. Scalability also means you can increase the sheer number of resources in your environment, such as adding more virtual machines or terminating some that you have deployed. This is an example of scaling horizontally.

767) As an example of an important cloud characteristic, let's say you deploy a small website today. Next week, you add complex artificial intelligence services to it that are provided by a public cloud vendor. The following week, you deploy your website to multiple regions around the globe.

What concept or characteristic of cloud computing does this represent?

- A. High availability
- B. Security
- C. Growth
- D. Utility-based metering

Correct Answer: C

The hypothetical scenario above is an example of growth which the cloud makes possible. You start with something simple, then innovate with advanced, easy to provision services hosted by the cloud vendor, and expand to a global market.

768) In what way is a private cloud model similar to a public cloud model?

- A. Both private and public cloud models physical hardware are managed by the end users hosting their applications on the hardware.
- B. In both private and public cloud models, the cloud infrastructure is hosted on the premises of a business using it.
- C. Using both private and public cloud will increase a business' capital expenditures to acquire hardware hosting the cloud.
- D. Both private and public cloud models use virtualization to differentiate themselves from traditional on-premise servers.

Correct Answer: D

The only correct statement is that both private and public cloud models use virtualization to differentiate themselves from traditional on-premise servers.

769) Which service model allows you to configure and customize your environment from the hardware up?

- A. Software as a Service (SaaS)
- B. Infrastructure as a Service (IaaS)
- C. Platform as a Service (PaaS)
- D. 'Anything' as a Service (XaaS)

Correct Answer: B

IaaS provides the greatest level of customization as you can configure the environment from the ground up, starting from which operating system to install and up. Other service models have fixed components which you are unable to change or manage.

<https://aws.amazon.com/what-is/iaas/>

770) The _____ model requires no software installation and focuses on design simplicity and ease of use. It offers a minimal level of service customization.

- A. Infrastructure-as-a-Service
- B. Platform-as-a-Service
- C. Software-as-a-Service
- D. Traditional on-premise

Correct Answer: C

The SaaS cloud service model focuses on the delivery of an application to a large audience and requires the smallest amount of user administration. As a trade-off, it offers very few customization options.

771) There are numerous questions a business should consider before it starts planning a migration to the cloud. Which of the following is not a fundamental business question to consider?

- A. How will migration address the current weaknesses in my business?
- B. How will migration to the cloud help me achieve key business objectives?
- C. What technologies will my business utilize in the cloud?
- D. How will migration to the cloud provide benefits to my customers?

Correct Answer: C

Before you consider the technical nuts and bolts of migrating a business to the cloud, it is important to have a clear understanding of how the migration as a whole will benefit a business. Will migration strengthen weak areas of a business, will it improve the overall experience for the customer in some tangible ways, and will it help a business reach key objectives. These are much more important, in the big picture, than the technical aspects of the migration - which will be of paramount importance in later stages of migration.

772) What cloud resource type stores structured data used by cloud applications?

- A. Storage
- B. Compute
- C. Network
- D. Database

Correct Answer: D

Cloud database resources store structured data used by applications, and in the classic resource model, it is comparable to MySQL, Oracle and database servers.

773) What is a key benefit of Virtualization?

- A. Increased operational cost
- B. Quicker remote connectivity
- C. Reduced network latency
- D. Reduced capital expenditure

Correct Answer: D

As Virtualization allows for multiple VMs to be installed on the same physical host, it maximizes the optimization potential and reduces the requirement to purchase additional servers, resulting in a reduced capital expenditure

774) You have been hired as an IT summer intern for a small, but quickly expanding, restaurant chain. The restaurant chain owner wants to expand her online presence by creating a website that will add more online features such as downloadable menus, real-time reservations, online ordering, web-based email, and a possible interactive chat during restaurant hours.

The website will have high access demands from the 4:00 pm to 11:00 pm peak hours, and slower access demands during off-peak hours. The owner does not have any IT experience, and does not want to become involved in the extra work of maintaining IT equipment.

What do you recommend she do?

- A. Implement a hybrid cloud-computing environment.
- B. Implement a private cloud-computing environment.
- C. Implement a public cloud-computing environment.
- D. Implement a matrixed cloud-computing environment.

Correct Answer: C

Public clouds utilize cloud resources (like servers and storage) that are owned and operated by a third-party cloud service provider and delivered over the Internet. With a public cloud, all hardware, software, and other supporting infrastructure are owned and managed by the cloud provider. The public cloud model provides several advantages for the restaurant chain owner. First, there are lower costs because there is no need to purchase hardware or software, and you pay only for the service you use.

Second, there are no maintenance issues as your service provider provides the maintenance. Third, there is near-unlimited scalability because on-demand resources are available to meet the business's needs. Fourth, there is high reliability because a vast network of servers ensures against failure.

775) The _____ cloud service model offers a balance between customization and user control, allowing developers to focus on designing at the application layer while the service handles the administration of the virtual architecture, including the network and operating system.

- A. Infrastructure-as-a-Service
- B. Platform-as-a-Service
- C. Software-as-a-Service
- D. Traditional on-premise

Correct Answer: B

A PaaS cloud service model allows access to the framework above the operating system level, which is ideal for developers who want to focus on their application design while the service itself manages a large portion of the day-to-day service administration.

776) The public cloud allows you to pay only for the time that you use cloud resources, not for the cost of ownership. This concept is known as _____.

- A. consumption-based metering
- B. shared infrastructure
- C. economy of scale
- D. scalability

Correct Answer: A

Consumption-based metering simply means you pay for what you use. Public cloud vendors offer different services at different units of time, some reserved for multiple years, and others charged based on milliseconds.

777) Which resources provide the connectivity allowing all other resources to communicate with each other?

- A. Storage
- B. Compute
- C. Servers
- D. Network

Correct Answer: D

As a classic environment comparison, in a typical environment you would find hardware such as Routers to route traffic between networks, switches which provide the backbone of network connectivity allowing hosts to talk to one another, and firewalls to 'allow' or 'deny' traffic into the environment

778) You have deployed a small web app to your cloud service provider's server. You place a load balancer in front of the application and deploy a second version of the app into a second availability zone. What are you hoping to accomplish with this design?

- A. High availability
- B. Security
- C. On-demand resourcing
- D. Consumption-based metering

Correct Answer: A

The hypothetical scenario above is an example of high availability. The load balancer will evenly distribute traffic between the two instances in each availability zone to ensure all traffic is handled appropriately.

779) Which cloud resource saves and retains structured and unstructured data, including photos, videos, or log files, and is available at a near-unlimited amount within the cloud?

- A. Storage
- B. Compute
- C. Network
- D. Database

Correct Answer: A

Cloud storage, as the name implies, stores and saves data, and is comparable to hard disks on a personal computer, or network-attached storage (NAS) or storage area networks (SAN).

780) Public cloud vendors have a common definition of what aspects of security are the vendor's responsibility and what aspects of security are the end user's responsibility. This is referred to as the Shared Responsibility Model.

Under the Shared Responsibility Model, which of the following would be the end user's responsibility?

- A. Access to the physical datacenter
- B. Operation and administration of the hardware hosting virtual resources
- C. Availability of a cloud storage service
- D. Creating authentication and authorization mechanisms for a cloud storage service

Correct Answer: D

The vendor will operate to an exceptionally high standard of security for the underlying infrastructure of the cloud, but it's up to you as the end-user to then architect security in the cloud by using the tools, services, and applications available.

781) What are some of the benefits that the public cloud provides when compared to on-premises data centers? (Choose 3 answers)

- A. Minimizing issues caused by outdated technology
- B. Potential for exponential growth
- C. Simplify experimentation with new technology
- D. Compatibility with any application

Correct Answer: ABC

Moving to the cloud allows users to take advantage of the latest wave of technology, such as serverless designs or container orchestration through Kubernetes services. It also gives customers the ability to scale up almost instantly, without as much set up time as would be required for an on-premises data center. The cloud also helps customers avoid losses related to outdated technology because the public cloud providers are always competing with one another to provide the most up-to-date technology, leaving the customers to innovate on how to use that technology.

However, it is possible that business applications are not compatible with the cloud. This is a constraint that leads many businesses to adopt a hybrid cloud approach or to redesign applications for the cloud.

782) A _____ cloud deployment model is where a vendor makes available the use of shared infrastructure, including compute, storage and network resources, that can be provisioned on demand and typically accessed over the internet.

- A. private
- B. public
- C. hybrid
- D. community

Correct Answer: *B*

Public clouds allow for users to access remote resources on-demand, which is accessed over the internet. Anyone can gain access to the vendors' resources as long as they sign up to the service. Private, hybrid and community clouds are restricted on access.

783) In AWS IAM, _____ are used for programmatic access to your AWS resources.

- A. auth certificates
- B. path structures
- C. MFAs
- D. access keys

Correct Answer: D

Access keys are used for programmatic access to your AWS resources, and they are comprised of two elements.

784) Which AWS service allows you to provide reports regarding compliance with standard regulations such as Payment Card Industry or SOC?

- A. AWS Artifact
- B. Amazon Trusted Advisor
- C. AWS Organizations
- D. Amazon Inspector

Correct Answer: A

785) The Amazon Inspector service provides which of the following benefits? (Choose 2 answers)

- A. It assesses the exposure of attack points.
- B. It scales and centralizes security management.
- C. It simplifies compliance.
- D. It automates responses to security attacks.

Correct Answer: AC

786) AWS IAM _____ are objects that have policy permissions associated to them, and can be associated to EC2 instances or other AWS services as service controls.

- A. roles
- B. instances
- C. users
- D. groups

Correct Answer: A

IAM roles are objects that have policy permissions associated to them. However, instead of just being associated with users as groups are, roles can be associated to EC2 instances or other AWS services as service controls.

787) Under the shared responsibility model, which aspects of security in the AWS cloud are the responsibility of the user rather than AWS? (Choose 3 answers)

- A. Network hardware maintenance
- B. Data encryption
- C. Installation of EC2 security patches
- D. EC2 instance security

Correct Answer: BCD

788) What is the core function of AWS Firewall Manager?

- A. to rotate, manage, and retrieve secrets
- B. to provision, manage, and deploy SSL/TLS certificates
- C. to provide identity management for your apps
- D. to help you simplify the management of security protection to a range of different resources, between multiple AWS accounts

Correct Answer: D

The core function of AWS Firewall Manager is to help you simplify the management of being able to provide security protection to a range of different resources, between multiple AWS accounts.

789) In the context of IAM identities, an IAM _____ is a collection of IAM users.

- A. group
- B. AWS Account
- C. role
- D. permission

Correct Answer: A

An IAM group is a collection of IAM users that you can manage as a unit.

http://docs.aws.amazon.com/IAM/latest/UserGuide/Using_GroupsAndUsers.html

790) Which AWS service uses machine learning to do its work and helps you discover and analyze sensitive data stored in Amazon S3 buckets?

- A. AWS Config
- B. Amazon Macie
- C. Amazon Inspector
- D. Amazon GuardDuty

Correct Answer: *B*

Amazon Macie uses machine learning to do its work and helps you discover and analyze sensitive data stored in Amazon S3 buckets, including personal identifiable information, or PII, such as names, addresses, credit card numbers, API keys, and access credentials, among many others.

791) Amazon _____ is an intelligent threat detection service that provides you with an accurate way to consistently monitor and protect your AWS accounts and workloads for suspicious activity.

- A. Config
- B. Macie
- C. Inspector
- D. GuardDuty

Correct Answer: D

Amazon GuardDuty is an intelligent threat detection service that provides you with an accurate way to consistently monitor and protect your AWS accounts and workloads for suspicious activity.

792) What is a service control policy (SCP) within the AWS Organizations service?

- A. A hierarchical, visual representation of your company's entire AWS account structure
- B. A method of categorizing a company's multiple AWS accounts
- C. A method of controlling which AWS services are accessible for specific AWS accounts within your AWS account structure
- D. A container at the top of a company's AWS accounts structure

Correct Answer: C

793) AWS IAM _____ are account objects that allow an individual user to access an AWS environment with a set of credentials.

- A. policies
- B. users
- C. groups
- D. roles

Correct Answer: B

The IAM users are account objects that allow an individual user to access your AWS environment with a set of credentials.

794) In AWS IAM, _____ allow(s) credentials external to AWS to be used as a means of authentication to your AWS resources.

- A. AWS Managed Policies
- B. Multi-Factor Authentication
- C. STS
- D. Federated Access

Correct Answer: D

Federated Access allows credentials external to AWS to be used as a means of authentication to your AWS resources.

795) What is AWS Organizations?

- A. a service that provides a means of centrally managing and categorizing multiple AWS accounts that you own, bringing them together into a single organization
- B. a service that enables you to assess, audit, and evaluate the configurations of your AWS resources
- C. a service that makes it easier to manage your software licenses from vendors such as Microsoft, SAP, Oracle, and IBM across AWS and on-premises environments
- D. a service that enables you to launch and manage virtual private servers

Correct Answer: A

796) Which of the following best describes a grant in AWS KMS?

- A. A method used to encrypt large data objects within your own application outside AWS KMS
- B. A mechanism that creates log files containing a history of AWS API calls and related events for your account
- C. A method used to encrypt data keys used by AWS services to protect data when you don't specify
- D. A delegation mechanism that you can use to provide other AWS principals long-term permissions to use master keys

Correct Answer: D

A grant in AWS KMS is a delegation mechanism that you can use to provide other AWS principals long-term permissions to use master keys. They are also intended to allow asynchronous use of KMS keys when the duration of usage is not known up-front but could possibly be long term.

797) Which of the following statements about IAM policy evaluation in AWS is false?

- A. An explicit allow will always take precedence over a deny.
- B. If a single deny exists within any policy associated with the same principle against the same resource, then that deny will overrule any previous allow that might exist for the same resource and action.
- C. By default, all access to a resource is denied.
- D. Access to a resource is only allowed if an allow has been specified within a policy associated with the principal.

Correct Answer: A

The rules for reviewing permissions across multiple policies in a single account are actually quite simple and can be summarized like this: by default, all access to a resource is denied. Access will only be allowed if an allow has been specified within a policy associated with the principle. If a single deny exists within any policy associated with the same principle against the same resource then that deny will overrule any previous allow that might exist for the same resource and action. So to reiterate, an explicit deny will always take precedence over an allow.

798) _____ used within AWS IAM are written as JSON documents and define what can and can't be accessed.

- A. Policies
- B. Rules
- C. Roles
- D. User groups

Correct Answer: A

Policies used within IAM are written as JSON documents, and these define what can and can't be accessed.

799) In AWS KMS, which type of KMS key is not visible within the KMS console or anywhere in your account?

- A. Customer-managed KMS key
- B. AWS-managed KMS key
- C. Customer-owned KMS key
- D. AWS-owned KMS key

Correct Answer: D

AWS-owned KMS keys are not visible within the KMS console or anywhere within your account; neither do you have the ability to audit and track their usage. They are essentially abstracted from your AWS account.

800) Which element of an AWS IAM policy can be set to either Allow or Deny?

- A. condition
- B. statement
- C. effect
- D. action

Correct Answer: C

801) In AWS IAM, a(n) _____ policy is one that is embedded within the identity object itself.

- A. user
- B. role
- C. inline
- D. group

Correct Answer: C

https://docs.aws.amazon.com/IAM/latest/UserGuide/access_policies_managed-vs-inline.html#inline-policies

802) What is the AWS Web Application Firewall?

- A. a service that allows you to create and manage AWS users and groups, and use permissions to allow and deny their access to AWS resources
- B. a service that makes it easy to create and manage cryptographic keys and control their use across a wide range of AWS services and in your applications
- C. a service that enables governance, compliance, operational auditing, and risk auditing of your AWS account
- D. a service that helps to prevent web sites and web applications from being maliciously attacked by common web attack patterns

Correct Answer: D

The AWS Web Application Firewall is a service that helps to prevent web sites and web applications from being maliciously attacked by common web attack patterns such as SQL injection and cross-site scripting.

803) To manage access to your AWS KMS keys in AWS Key Management Service, you must use a(n) _____.
A. permission
B. data encryption key
C. IAM policy
D. key policy

Correct Answer: D

804) Which AWS service allows customers to analyze their deployed EC2 instances and helps identify potential security issues?

- A. AWS Config
- B. Amazon Macie
- C. Amazon Inspector
- D. Amazon GuardDuty

Correct Answer: C

Amazon Inspector lets you analyze your deployed EC2 instances and helps you identify potential security issues. Some of the basic features include a knowledge base with hundreds of rules that are mapped to common security compliance standards and vulnerability definitions.

805) You have launched a virtual machine on AWS. Which of the following is AWS responsible for under the Shared Responsibility Model?

- A. Security of the physical hardware at AWS data centers
- B. Network security in your AWS network
- C. Security of scripts used in any application code
- D. Secure storage of your AWS account credentials

Correct Answer: A

Security is a very large topic and we will be going into a lot more detail over several courses. But it is important to get a basic understanding of the core security principle that AWS supplies to its services often called the AWS Shared Security Responsibility Model. Quite simply, it explains what parts of the security AWS takes responsibility for and which parts AWS expects you to manage

806) Which of the following describes IAM groups? (Choose 2 answers)

- A. IAM groups contain users
- B. IAM groups have IAM policies assigned to them
- C. IAM groups are used for authentication
- D. IAM groups are shared by an unlimited number of users by default

Correct Answer: AB

https://docs.aws.amazon.com/IAM/latest/UserGuide/id_groups.html

807) In AWS IAM, configuring _____ allows for an additional level of verification to be applied: namely, the user will have to enter a random six-digit number from a linked device after their usual password.

- A. AWS Managed Policies
- B. Multi-Factor Authentication
- C. STS
- D. Federated Access

Correct Answer: B

Configuring MFA allows for an additional level of verification to be applied. The user will have to enter a random six-digit number from a linked MFA device after their usual password.

808) An AWS cost and usage report is updated at least _____.

- A. three times per hour
- B. once per day
- C. once per week
- D. three times per day

Correct Answer: *B*

A cost and usage report is updated at least once per day and up to three times.

809) Which of the following is not one of the five pillars of the AWS Well-Architected Framework?

- A. cost optimization
- B. reliability
- C. scalability
- D. security

Correct Answer: C

AWS has developed a structure of best practices and strategies to use when building software in the cloud, called the AWS Well-Architected Framework. The framework is based on five pillars that ensure a secure, reliable, efficient, and cost-effective system: operational excellence, security, reliability, performance and efficiency, and cost optimization.

810) Development, test/stage, and production are all examples of values for which common AWS resource tag?

- A. Environment
- B. Cost Center/Business Unit
- C. Service/Workload
- D. Resource Owner

Correct Answer: A

The Environment tag determines the cost difference between different environments, for example, dev, test/stage, and production.

811) To ensure that you extract the full economic potential of the AWS Cloud at any scale, you must define and enforce cost allocation tagging. This relates to which aspect of cost optimization defined by AWS?

- A. leverage the right pricing model
- B. measure, monitor, and improve
- C. optimize storage
- D. right-sizing

Correct Answer: B

Measure, monitor, and improve: To ensure that you extract the full economic potential of the AWS Cloud at any scale, you want to define and enforce cost allocation tagging.

<https://docs.aws.amazon.com/wellarchitected/latest/cost-optimization-pillar/welcome.html>

812) In a cloud environment, a(n) _____ instance is a disposable instance that is only used for a limited time and on demand.

- A. reserved
- B. orphaned
- C. spot
- D. untagged

Correct Answer: C

Spot instances instances are only used for a limited time and on demand.

813) The AWS _____ is a complex CSV file that stores all details about your cost and usage data for all AWS resources.

- A. Financial Report (FR)
- B. Recurrent Charges Report (RCR)
- C. Billing Report (BR)
- D. Cost and Usage Reports (CUR)

Correct Answer: D

The CUR is a pretty complex CSV file that stores all details about your cost and usage data for all AWS resources. Enabling the CUR is super important because it's the most granular and detailed mechanism with which to collect data for AWS costs and usage. It offers historical by-the-hour data that can offer clarity on trends and lead to a more accurate data-driven insight.

814) Which statements regarding compute savings plans are correct? (Choose 3 answers)

- A. Compute savings plans can be applied to multiple AWS compute services.
- B. Compute savings plans provide a higher discount on instance costs than EC2 Instance Savings Plans
- C. Compute savings plans can apply to resources in different regions.
- D. Compute savings plan discounts apply across instance families.

Correct Answer: ACD

<https://aws.amazon.com/savingsplans/compute-pricing/>

815) _____ is a comprehensive assessment of IT's total costs or other costs over time.

- A. Total summative assessment
- B. Total cost of ownership
- C. Summative cost
- D. Weighted cost allocation

Correct Answer: B

TCO stands for total cost of ownership and is a comprehensive assessment of IT's total costs or other costs over time.

816) What is an AWS region?

- A. A small group of AWS-managed data centers located relatively close together
- B. A single physical data center hosting AWS virtual resources
- C. A large data cache in a highly populated area that delivers CDN content
- D. A large, defined geographic area that contains multiple availability zones.

Correct Answer: D

A region is a collection of availability zones that are geographically located close to one other. This is generally indicated by AZs within the same city. AWS has deployed them across the globe to allow its worldwide customer base to take advantage of low latency connections. Every Region will act independently of the others, and each will contain at least three Availability Zones. The other answers describe an availability zone, a common misconception for an availability zone, and an edge location.

817) Which of the following describes AWS Budgets?

- A. A dashboard that provides quick insights into your recent account cost and usage.
- B. A collection of dynamic graphs that allow you to discover usage trends and provides estimated usage and cost forecasts.
- C. A set of reports that provide detailed historic cost and usage data for your account.
- D. A service that allows you to set specific spending and usage limits for AWS services

Correct Answer: D

AWS Budgets is a service within the Billing and Cost Management console that allows you to set limits for service usage, cost, and reserved instance utilization. You can create alerts to receive notifications when you exceed or are forecasted to exceed your specific thresholds.

https://aws.amazon.com/aws-cost-management/aws-budgets/?nc2=h_m1

818) _____ are metadata attached to a specific resource running in AWS, and are meant to provide contextual information about the resource.

- A. Annotations
- B. Tags
- C. Snapshots
- D. Roles

Correct Answer: *B*

Tags are metadata attached to a specific resource running in AWS. They are meant to provide contextual information about the resource.

819) What does the phrase 'stop guessing capacity' mean?

- A. Scaling resource usage based on performance metrics
- B. Implementing self-healing processes
- C. Establishing correct data storage lifecycles
- D. Using elastic IP addresses to increase high availability

Correct Answer: A

One of the best practices of the reliability pillar of the Well-Architected Framework is to 'stop guessing capacity.' This looks at the use of Auto Scaling to prevent the need to predict and guess your capacity and demand requirement which aids in a better end-user experience.

https://d1.awsstatic.com/whitepapers/architecture/AWS_Well-Architected_Framework.pdf

820) According to the AWS Well-Architected Framework, which of these is an example of operational excellence?

- A. Constantly improving and efficiently managing workloads
- B. Protecting data, systems, and components using cloud technologies
- C. Efficiently allocating and right-sizing computing resources by the system requirements
- D. Understanding and controlling expenses, avoiding unnecessary costs, and analyzing spend in detail

Correct Answer: A

The operational excellence pillar aims at constant improvement and efficient managing of workloads, as well as gaining operational insights and continuous improvement of processes and procedures to support business value.

The security pillar describes how to protect data, systems, and components using cloud technologies, how user rights and privileges are correctly managed, and how integrity and conformity of information is maintained.

The performance and efficiency pillar is the efficient allocation and right-sizing of computing resources by the system requirements and interception of demand changes

The cost optimization pillar is understanding and controlling expenses, avoiding unnecessary costs, and analyzing spend in detail

821) In a cloud environment, a(n) _____ instance is one that is booked for the long term.

- A. reserved
- B. orphaned
- C. spot
- D. untagged

Correct Answer: A

822) What is an AWS Availability Zone?

- A. An isolated location that contains multiple AWS-managed data centers
- B. An isolated location that contains a single AWS-managed data center
- C. A single AWS-managed server that customers host on-premises
- D. A large cache located in highly populated areas to deliver CDN content

Correct Answer: A

An availability zone is an isolated location containing multiple physical data centers located close together hosting AWS virtual resources.

An availability zone is often mistaken for a single physical data center hosting AWS virtual resources. A common misconception is that a single availability zone equals a single data center. This is not the case. Multiple data centers located close together can form a single availability zone.

AWS Outposts offers a single AWS-managed server that customers host on-premises.

An edge location is a cache in a highly populated area where AWS stores data for CDN services.

823) In AWS, tags provide the functionality to define metadata in the form of _____.
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- A. configuration files
- B. database tables
- C. algorithms
- D. key-value pairs

Correct Answer: D

Tags provide the functionality to define metadata in the form of key and value pairs.

824) _____ tags are special tags that are used by Cost Explorer and other services for allocation and visualization.

- A. Simple Resource Name
- B. Cost allocation
- C. Environment
- D. Cost visualization

Correct Answer: B

Cost allocation tags are special tags that are used by Cost Explorer and other services for allocation and visualization.

825) Which of the following actions is not one of the pillars of cost optimization defined by AWS?

- A. Forecast usage and costs.
- B. Optimize storage.
- C. Decrease elasticity.
- D. Leverage the right pricing model.

Correct Answer: C

Increase elasticity: Traditional IT costs and hardware requirements are tailored for peak usage and these resources are rarely turned off. In the cloud, you can optimize costs to meet dynamic needs and turn resources off when they are not needed. For example, you can usually turn off non-production instances for 70% or more of any given week.

826) Which of the following cost management tools provides cost and usage graphs for the previous and current month?

- A. The AWS Billing Dashboard
- B. The Total Cost of Ownership Calculator
- C. Consolidated Billing
- D. AWS Budgets

Correct Answer: A

The Billing Dashboard provides graphs that show the overall cost and usage for the previous month, as well as the current month to date. There are three separate graphs, we'll briefly cover each of them.

827) In AWS, _____ allow the user to receive notifications when costs or usage exceed a certain predefined amount.

- A. budgets
- B. quotas
- C. thresholds
- D. alarms

Correct Answer: A

Budgets allow the user to get notified when costs or usage exceed a certain predefined amount.

828) A _____ is the base throughput unit of an Amazon Kinesis stream.

- A. shard
- B. data blob
- C. sequence
- D. record

Correct Answer: A

829) Which AWS service enables you to store message data until your application is able to process it?

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

Correct Answer: A

Amazon Simple Queue Service (Amazon SQS) is a web service that gives you access to message queues that store messages waiting to be processed. With Amazon SQS, you can quickly build message queuing applications that can run on any computer.

Amazon SQS offers a reliable, highly scalable, hosted queue for storing messages in transit between computers. With Amazon SQS, you can move data between diverse, distributed application components without losing messages and without requiring each component to be always available.
<https://aws.amazon.com/sqs/faqs/>

830) Which AWS service allows you to build serverless applications that are more scalable than your standard direct-to-RDS implementations?

- A. Amazon EC2
- B. Amazon DynamoDB
- C. Amazon Aurora
- D. Amazon RDS Proxy

Correct Answer: D

Amazon RDS Proxy is a fully managed, serverless, highly available database proxy for Amazon RDS. The proxy allows you to build serverless applications that are more scalable than your standard direct-to-RDS implementations.

831) Which AWS service is a fully managed service that assists with building, publishing, monitoring, securing, and maintaining APIs within AWS?

- A. Amazon API Gateway
- B. Amazon S3
- C. AWS AppSync
- D. AWS Lambda

Correct Answer: A

AWS has created a fully managed service called Amazon API Gateway that helps deal with building, publishing, monitoring, securing, and maintaining APIs within AWS.

832) Which Amazon Kinesis solution capability enables you to build custom applications that process or analyze streaming data for specialized needs?

- A. Amazon Kinesis Streams
- B. Amazon Kinesis Firehose
- C. Amazon Kinesis Video Streams
- D. Amazon Kinesis Elasticsearch

Correct Answer: A

Amazon Kinesis provides three different solution capabilities. Amazon Kinesis Streams enables you to build custom applications that process or analyze streaming data for specialized needs. Amazon Kinesis Firehose enables you to load streaming data into the Amazon Kinesis Analytics, Amazon S3, Amazon Redshift, and Amazon Elasticsearch services. Amazon Kinesis Analytics enables you to write standard SQL queries on streaming data.

833) Regarding Amazon SNS, _____ communicate asynchronously with _____ by producing and sending a message to a topic, which is a logical access point and communication channel.

- A. publishers; subscribers
- B. queues; topics
- C. brokers; recipients
- D. clients; services

Correct Answer: A

<http://docs.aws.amazon.com/sns/latest/dg/welcome.html>

834) Amazon Kinesis _____ is used to perform stream processing on binary-encoded data.

- A. Data Analytics
- B. Data Firehose
- C. Video Streams
- D. Data Streams

Correct Answer: C

Kinesis Video Streams is used to do stream processing on binary-encoded data, such as audio and video.

835) Which of the following architectures specifically responds to changes within its infrastructure's state?

- A. Event-driven architecture
- B. Decoupled architecture
- C. Monolithic architecture
- D. Microservice architecture

Correct Answer: A

Event-driven architectures closely relate and interact with decoupled architectures, however, services in an event-driven architecture are triggered by events that occur within the infrastructure. So what is an event? Well, an event can be a number of things, for example, a change of state, so a resource such as an EC2 instance changing from 'running' to 'stopped'—that is a change of state, or perhaps an order has been placed on your website and an item has been moved from for sale to sold, that could be a change of state within your application

836) Which SQS component is responsible for storing a message until it can be read?

- A. The producers
- B. The consumers
- C. The SQS servers
- D. The dead-letter queues

Correct Answer: C

The producer component of your architecture is responsible for sending messages to your queue. At this point, the SQS service stores the message across a number of SQS servers for resiliency within the specified queue. This ensures that the message remains in the queue should a failure occur with one of the SQS servers.

837) _____ applications essentially separate processing and data into different elements and components.

- A. Decoupled
- B. Elastic
- C. Migrated
- D. Scalable

Correct Answer: A

Decoupling the application architecture essentially splits out your processing and data into different elements and components, so building an application as a collection of services helps to build a decoupled application that would be more closely aligned and cloud-ready. Having the ability to scale out specific parts of your application, and having them work independently of each other allows for the flexibility and scalability of the cloud to take your application to new levels depending on demand.

838) What is an Amazon Kinesis stream?

- A. a fully-managed service for delivering real-time streaming data to destinations such as Amazon Simple Storage Service, or S3, Amazon Redshift, or Amazon Elasticsearch service
- B. a consumer that receives and processes records from an Amazon Kinesis firehose
- C. a producer that pushes data to an Amazon Kinesis firehose
- D. an ordered sequence of data records meant to be written to and read from in real-time

Correct Answer: D

839) In Amazon Kinesis Data Streams, a _____ application puts data into a stream as a series of data records.

- A. data stream
- B. producer
- C. consumer
- D. publisher

Correct Answer: B

840) Which Amazon Kinesis solution capability enables you to write standard SQL queries on streaming data?

- A. Amazon Kinesis Streams
- B. Amazon Kinesis Firehose
- C. Amazon Kinesis Analytics
- D. Amazon Kinesis OpenSearch

Correct Answer: C

Amazon Kinesis provides three different solution capabilities. Amazon Kinesis Streams enables you to build custom applications that process or analyze streaming data for specialized needs. Amazon Kinesis Firehose enables you to load streaming data into the Amazon Kinesis Analytics, Amazon S3, Amazon Redshift, and Amazon OpenSearch services. Amazon Kinesis Analytics enables you to write standard SQL queries on streaming data.

841) What is Amazon Kinesis Firehose?

- A. a fully-managed service for delivering real-time streaming data to destinations such as Amazon Simple Storage Service, or S3, Amazon Redshift, or Amazon OpenSearch service
- B. a consumer that receives and processes records from an Amazon Kinesis firehose
- C. a producer that pushes data to an Amazon Kinesis firehose
- D. an ordered sequence of data records meant to be written to and read from in real-time

Correct Answer: A

Amazon Kinesis Firehose is a fully-managed service for delivering real-time streaming data to destinations such as Amazon Simple Storage Service, or S3, Amazon Redshift, or Amazon OpenSearch service.

842) Which AWS service is a pub-sub notification service that provides both application-to-application and application-to-person communication?

- A. AWS Fargate
- B. Amazon SQS
- C. Amazon SNS
- D. Amazon API Gateway

Correct Answer: C

This service is a pub-sub notification service that provides both application-to-application and application-to-person communication. SNS can also act as an event-driven hub similar to Amazon EventBridge; It's just more bare bones.

843) Applications that process the data from a stream are known as _____.

A. consumers
B. producers
C. destinations
D. endpoints

Correct Answer: A

844) After it's configured, where do Amazon SQS messages go when they have failed to be read after the maximum number of attempts, so that a developer can review the message to determine the cause of failure?

- A. A user-created S3 bucket
- B. A Dead-Letter Queue
- C. An AWS-created S3 bucket
- D. They are not stored anywhere. The messages are deleted.

Correct Answer: B

A dead-letter queue differs from the standard and FIFO queues as this dead-letter queue is not used as a source queue to hold messages submitted by producers. Instead, the dead-letter queue is used by the source queue to send messages that fail to process for one reason or another.

845) Which SQS component is responsible for processing the messages within your queue?

- A. Producers
- B. Consumers
- C. SQS servers
- D. Dead-Letter Queues

Correct Answer: B

Consumers are responsible for processing the messages within your queue. As a result, when the consumer element of your architecture is ready to process the message from the queue, the message is retrieved and is then marked as being processed by activating the visibility timeout on the message.

846) AWS Step Functions can best be described as a serverless _____ service.

- A. storage
- B. messaging queue
- C. pub-sub
- D. state machine

Correct Answer: D

AWS Step Functions can best be described as a serverless state machine service.

847) Which AWS service allows you to manage and synchronize data across multiple mobile devices and users?

- A. AWS AppSync
- B. Amazon SQS
- C. Amazon SNS
- D. Amazon API Gateway

Correct Answer: A

848) Which AWS service is a fully managed, serverless, NoSQL database that has been built to run high-performance applications at any scale?

- A. Amazon S3
- B. Amazon RDS Proxy
- C. Amazon Aurora
- D. Amazon DynamoDB

Correct Answer: D

849) Which SQS component is responsible for sending messages to your queue?

- A. The producer
- B. The consumer
- C. the dead-letter queue
- D. the SQS server

Correct Answer: A

The producer component of your architecture is responsible for sending messages to your queue. At this point, the SQS service stores the message across a number of SQS servers for resiliency within the specified queue.

850) Which service allows you to run serverless containers on Amazon ECS?

- A. Amazon EventBridge
- B. Amazon API Gateway
- C. AWS Fargate
- D. AWS Lambda

Correct Answer: C

This service allows you to run serverless containers on Amazon ECS (the Elastic Container Service). One of the coolest aspects about Fargate is that it allows you to get over the 15 minutes' execution hurdle that plagues AWS Lambda.

851) Which AWS service provides intelligent recommendations to improve code quality and identify an application's most expensive lines of code?

- A. Amazon CodeGuru
- B. AWS CodeStar
- C. AWS CodeCommit
- D. AWS CodeDeploy

Correct Answer: A

Amazon CodeGuru is a developer tool that provides intelligent recommendations to improve code quality and identify an application's most expensive lines of code.

852) A company wants to expand from one AWS Region into a second AWS Region. What does the company need to do to expand into the second Region?

- A. Contact an AWS account manager to sign a new contract.
- B. Move an Availability Zone to the second Region.
- C. Begin to deploy resources in the second Region.
- D. Download the AWS Management Console for the second Region.

Correct Answer: C

853) Which AWS service provides storage that can be mounted across multiple Amazon EC2 instances?

- A. Amazon WorkSpaces
- B. Amazon Elastic File System (Amazon EFS)
- C. AWS Database Migration Service (AWS DMS)
- D. AWS Snowball Edge

Correct Answer: B

EFS is a [file storage service](#) for use with Amazon compute (EC2, containers, serverless) and on-premises servers. EFS provides a file system interface, file system access semantics (such as strong consistency and file locking), and concurrently accessible storage for up to thousands of EC2 instances.

854) A company needs to deploy applications in the AWS Cloud as quickly as possible. The company also needs to minimize the complexity that is related to the management of AWS resources. Which AWS service should the company use to meet these requirements?

- A. AWS Config
- B. AWS Elastic Beanstalk
- C. Amazon EC2
- D. Amazon Personalize

Correct Answer: B

AWS Elastic Beanstalk is a service that lets you deploy web applications and services on the cloud without worrying about the infrastructure details.

855) Which of the following is a way to use Amazon EC2 Auto Scaling groups to scale capacity in the AWS Cloud?

- A. Scale the number of EC2 instances in or out automatically, based on demand.
- B. Use serverless EC2 instances.
- C. Scale the size of EC2 instances up or down automatically, based on demand.
- D. Transfer unused CPU resources between EC2 instances.

Correct Answer: A

Amazon EC2 Auto Scaling groups allows you to automatically scale the number of Amazon Elastic Compute Cloud (EC2) instances in your application in or out, in response to changes in demand for your application. This helps ensure that you have the correct number of instances running to handle the traffic to your application. Auto Scaling can be configured to use CloudWatch alarms to determine when to scale the number of instances, and it can also be configured to scale based on a schedule. This can be done by creating policies that increase or decrease the number of instances, based on CloudWatch metrics, schedule or even by using a custom metric.

856) A company discovered unauthorized access to resources in its on-premises data center. Upon investigation, the company found that the requests originated from a resource hosted on AWS. Which AWS team should the company contact to report this issue?

- A. AWS Customer Service team
- B. AWS Sales team
- C. AWS Abuse team
- D. AWS Technical Support team

Correct Answer: C

If you suspect that AWS resources are used for abusive purposes, contact the AWS Trust & Safety team using the [Report Amazon AWS abuse form](#), or by contacting abuse@amazonaws.com. Provide all the necessary information, including logs in plaintext, email headers, and so on, when you submit your request.

857) Which of the following are aspects of the AWS shared responsibility model? (Choose two.)

- A. Configuration management of infrastructure devices is the customer's responsibility.
- B. For Amazon S3, AWS operates the infrastructure layer, the operating systems, and the platforms.
- C. AWS is responsible for protecting the physical cloud infrastructure.
- D. AWS is responsible for training the customer's employees on AWS products and services.
- E. For Amazon EC2, AWS is responsible for maintaining the guest operating system.

Correct Answer: BC

858) A company needs real-time guidance to follow AWS best practices to save money, improve system performance, and close security gaps.

Which AWS service should the company use?

- A. Amazon GuardDuty
- B. AWS Trusted Advisor
- C. AWS Management Console
- D. AWS Systems Manager

Correct Answer: *B*

AWS Trusted Advisor can save you money on AWS by eliminating unused and idle resources or by making commitments to reserved capacity. AWS Trusted Advisor can improve the performance of your service by checking your service limits, ensuring you take advantage of provisioned throughput, and monitoring for overutilized instances.

859) A company wants to organize its users so that the company can grant permissions to the users as a group. Which AWS service or tool can the company use to meet this requirement?

- A. Security groups
- B. AWS Identity and Access Management (IAM)
- C. Resource groups
- D. AWS Security Hub

Correct Answer: B

AWS Identity and Access Management (IAM) is a service that enables the company to control and manage access to AWS resources. IAM allows the company to create and manage users, groups and roles, and to grant permissions to those groups and roles. This enables the company to grant permissions to a group of users, rather than having to grant permissions individually to each user. With IAM, the company can create IAM users and groups and then grant permissions to those groups using policies. This allows the company to grant permissions to a set of users as a group, which helps to simplify the process of managing access to resources.

860) A company runs applications that process credit card information. Auditors have asked if the AWS environment has changed since the previous audit. If the AWS environment has changed, the auditors want to know how it has changed.

Which AWS services can provide this information? (Choose two.)

- A. AWS Artifact
- B. AWS Trusted Advisor
- C. AWS Config
- D. AWS CloudTrail
- E. AWS Identity and Access Management (IAM)

Correct Answer: CD

AWS Config is a fully managed service that provides you with an AWS resource inventory, configuration history, and configuration change notifications to enable security and governance.

861) A company wants to use a template to reliably provision, manage, and update its infrastructure in the AWS Cloud.

Which AWS service will meet these requirements?

- A. AWS Lambda
- B. AWS CloudFormation
- C. AWS Fargate
- D. AWS CodeDeploy

Correct Answer: B

When you use that template to create a CloudFormation stack, CloudFormation provisions the Auto Scaling group, load balancer, and database for you. After the stack has been successfully created, your AWS resources are up and running. You can delete the stack just as easily, which deletes all the resources in the stack. By using CloudFormation, you easily manage a collection of resources as a single unit.

862) A company is reviewing the current costs of running its own infrastructure on premises. The company wants to compare these on-premises costs to the costs of running infrastructure in the AWS Cloud.

How should the company make this comparison?

- A. Review the AWS shared responsibility model.
- B. Audit existing software and hardware licensing costs.
- C. Analyze the AWS Well-Architected Framework.
- D. Use Migration Evaluator.

Correct Answer: D

863) A company needs a low-code, visual workflow service that developers can use to build distributed applications.

Which AWS service is designed to meet these requirements?

- A. AWS Step Functions
- B. AWS Config
- C. AWS Lambda
- D. Amazon CloudWatch

Correct Answer: A

Step Functions manages your application's components and logic, so you can write less code and focus on building and updating your application quickly.

864) A company wants to accelerate migration from its data center to the AWS Cloud. Which combination of AWS services should the company use to meet this requirement? (Choose two.)

- A. Amazon Connect
- B. AWS Direct Connect
- C. AWS Server Migration Service (AWS SMS)
- D. Amazon Route 53
- E. AWS Organizations

Correct Answer: BC

AWS Server Migration Service (AWS SMS) automates the migration of your on-premises VMware vSphere, Microsoft Hyper-V/SCVMM, and Azure virtual machines to the AWS Cloud. AWS SMS incrementally replicates your server VMs as cloud-hosted Amazon Machine Images (AMIs) ready for deployment on Amazon EC2. Working with AMIs, you can easily test and update your cloud-based images before deploying them in production.

865) A company wants to deploy a Docker application to the AWS Cloud. However, the company does not want to manage the underlying servers.

Which combination of AWS services should the company use to meet these requirements? (Choose two.)

- A. Amazon EC2
- B. Amazon EC2 Auto Scaling
- C. AWS Elastic Beanstalk
- D. Amazon CloudFront
- E. AWS Fargate

Correct Answer: CE

AWS Elastic Beanstalk can launch **Docker** environments by building an image described in a **Dockerfile** or pulling a remote **Docker** image.

AWS Fargate is an easy way to deploy your containers on AWS. To put it simply, Fargate is like EC2 but instead of giving you a virtual machine you get a container. It's a compute engine that allows you to use containers as a fundamental compute primitive without having to manage the underlying instances.

866) A company needs to transfer 60 TB of data to the AWS Cloud in a secure manner.

Which of the following should the company use to meet these requirements?

- A. AWS Snowball Edge device
- B. Amazon Elastic Block Store (Amazon EBS)
- C. Amazon Elastic File System (Amazon EFS)
- D. Amazon S3

Correct Answer: A

Each Snowball Edge device can transport data at speeds faster than the internet. This transport is done by shipping the data in the appliances through a regional carrier.

867) A gaming company wants to move its on-premises environment to AWS. The company needs its resources to be highly available.

Which benefit does the AWS Cloud provide to meet this requirement?

- A. Reliability
- B. The AWS shared responsibility model
- C. Security
- D. Agility

Correct Answer: A

AWS provides a highly available and reliable infrastructure, which can help the gaming company to ensure that its resources are always available to its users. The AWS Cloud provides a variety of services and features that can be used to achieve high availability, such as Amazon Elastic Compute Cloud (EC2) Auto Scaling, Amazon Elastic Block Store (EBS) and Amazon Elastic File System (EFS), which can help the company to automatically scale its resources to handle changes in demand, and to ensure that its data is stored on multiple servers to protect against data loss.

868) An ecommerce company has been monitoring usage of its online store that is hosted on a fleet of Amazon EC2 instances. Surges in traffic occur every weekend day at the same time and last for approximately 4 hours.

Which AWS service should the company use to ensure that there are enough instances to meet the surges in demand?

- A. AWS Lambda
- B. Amazon EventBridge (Amazon CloudWatch Events)
- C. Elastic Load Balancing (ELB)
- D. Amazon EC2 Auto Scaling

Correct Answer: D

Amazon EC2 Auto Scaling is a service that enables the company to automatically scale the number of Amazon Elastic Compute Cloud (EC2) instances in its application up or down, in response to changes in demand. The company can use Auto Scaling to ensure that there are enough instances to handle the surges in traffic that occur every weekend.

869) A company needs stateless network filtering for its VPC.
Which AWS service, tool, or feature will meet this requirement?

- A. AWS PrivateLink
- B. Security group
- C. Network access control list (ACL)
- D. AWS WAF

Correct Answer: C

Network ACLs are stateless, which means that responses to allowed inbound traffic are subject to the rules for outbound traffic (and vice versa).

870) A company needs to audit its AWS resources. The company must document any changes that have been made to the resources.

Which AWS service will meet these requirements?

- A. AWS Artifact
- B. AWS Config
- C. Amazon Inspector
- D. Amazon CloudWatch

Correct Answer: B

AWS Config is a service that allows you to track changes made to your AWS resources, and to determine the current configuration of your resources. It provides an inventory of your resources, and it continuously monitors and records configuration changes made to these resources.

AWS Config can record changes made to your resources through the AWS Management Console, AWS CLI, and SDKs, as well as by other AWS services, such as AWS CloudFormation, AWS Elastic Beanstalk, and AWS Elastic Container Service.

871) A company needs fully managed, highly reliable, and scalable file storage that is accessible over the Server Message Block (SMB) protocol.

Which AWS service will meet these requirements?

- A. Amazon S3
- B. Amazon Elastic File System (Amazon EFS)
- C. Amazon FSx for Windows File Server
- D. Amazon Elastic Block Store (Amazon EBS)

Correct Answer: C

Amazon FSx for Windows File Server is a fully managed, highly reliable, and scalable file storage service that is accessible over the Server Message Block (SMB) protocol. It provides fully managed, highly reliable, and scalable file storage that is accessible over the SMB protocol. It is designed to work with the Microsoft Windows operating system and it supports the SMB protocol which allows to access the file storage from Windows servers and clients.

872) What is the process of defining an identity and the verification of that identity?

- A. Authentication
- B. Access control
- C. Authorization
- D. Encryption

Correct Answer: A

Authentication: Process of defining an identity and the verification of that identity

•Example - username and password

873) Which AWS service can help you add a layer of timeout-and-retry logic to your AWS Lambda functions to assist with managing failures with zero code?

- A. AWS Step Functions
- B. Amazon Managed Workflows for Apache Airflow
- C. Amazon EventBridge
- D. Amazon CloudWatch

Correct Answer: A

Step Functions offer a no-code solutions for managing workflows in AWS – including if those workflows fail. In this case, you have options to retry the event several times and also cancel them if they are taking too long to complete.

<https://docs.aws.amazon.com/step-functions/latest/dg/concepts-error-handling.html>

874) Which of the following AWS data transfers is free?

- A. Data transfers within the same availability zone
- B. Data transfers between different availability zones
- C. Data transfers between different AWS regions
- D. Data transfers in and out of AWS over the public internet

Correct Answer: A

Data transfer within the same Availability Zone is free. Data transfer charges apply for cross-AZ communication, cross-regional communication, and outside of AWS over the public internet.

There may be specific cases when transfers cross-AZ, cross-region, or outside of AWS using the public internet are free - but these are the exceptions rather than the general rules and guidelines as provided by AWS.

<https://aws.amazon.com/blogs/architecture/overview-of-data-transfer-costs-for-common-architectures/>

875) What is an example of the global reach AWS can provide?

- A. Paying a lower cost by sharing AWS-managed hardware with other AWS customers.
- B. Deploying identical, virtual applications for customers on multiple continents
- C. Tuning your resource capacity to your needs
- D. Focusing on app development rather than hardware installation and management

Correct Answer: B

Easily deploy your application in multiple regions around the world with just a few clicks. This means you can provide lower latency and a better experience for your customers at minimal cost.

<https://docs.aws.amazon.com/whitepapers/latest/aws-overview/six-advantages-of-cloud-computing.html>

876) What is the core function of AWS Firewall Manager?

- A. to rotate, manage, and retrieve secrets
- B. to provision, manage, and deploy SSL/TLS certificates
- C. to provide identity management for your apps
- D. to simplify network security management across multiple AWS accounts

Correct Answer: D

The core function of AWS Firewall Manager is to help you simplify the management of being able to provide security protection to a range of different resources, between multiple AWS accounts.

877) Which service uses defined network rules to protect websites or web applications from being maliciously attacked by common web attack patterns?

- A. AWS WAF
- B. AWS Direct Connect
- C. AWS X-Ray
- D. Amazon SQS

Correct Answer: A

AWS WAF is a web application firewall that lets you monitor the HTTP(S) requests that are forwarded to your protected web application resources. You can protect the following resource

- Amazon CloudFront distribution
- Amazon API Gateway REST API
- Application Load Balancer
- AWS AppSync GraphQL API
- Amazon Cognito user pool
- AWS App Runner service
- AWS Verified Access instance

AWS WAF lets you control access to your content. Based on criteria that you specify, such as the IP addresses that requests originate from or the values of query strings, the service associated with your protected resource responds to requests either with the requested content, with an HTTP 403 status code (Forbidden), or with a custom response.

<https://docs.aws.amazon.com/waf/latest/developerguide/waf-chapter.html>

878) What advantages can Amazon RDS provide when hosting a database that Amazon EC2 cannot? (Choose 3 answers)

- A. Automatic failover in the event of DB failure
- B. AWS-managed database patching
- C. Hosting legacy databases with minimal redesign
- D. Scheduled data backups

Correct Answer: ABD

[\[www.shapingpixel.com\]\(http://www.shapingpixel.com\)](https://docs.aws.amazon.com/AmazonRDS/latest/UserGuide>Welcome.html</p></div><div data-bbox=)

879) Which AWS service allows the sharing of certain resources between separate AWS accounts?

- A. AWS Outposts
- B. AWS EC2 Image builder
- C. AWS Resource Access Manager
- D. AWS Direct Connect

Correct Answer: C

AWS Resource Access Manager is used to create shared resources between multiple AWS accounts.

880) Which of the following services provided by AWS can monitor EC2 instances by pinging DNS addresses to determine the instances' health?

- A. Amazon CloudWatch
- B. AWS Lambda
- C. Amazon Route 53
- D. Amazon CloudTrail

Correct Answer: C

Route 53 service is mainly used for checking the health of the instances. To check the health of the instances we can ping a certain DNS point and we should get response from the instance if the instances are healthy.

881) Consider the three types of IAM policies - AWS-managed, customer-managed, and inline policies. Which policy type(s) can be edited?

- A. Only inline policies
- B. AWS-managed and inline policies
- C. AWS-managed and customer-managed policies
- D. Customer-managed and inline policies

Correct Answer: D

A policy is an entity that, when attached to an identity or resource, defines its permissions. Policies are stored in AWS as JSON documents and are attached to principals as identity-based policies in IAM. You can attach an identity-based policy to a principal (or identity), such as an IAM user group, user, or role. Identity-based policies include AWS-managed policies, customer-managed policies, and inline policies. You can edit customer-managed policies and inline policies in IAM. AWS-managed policies cannot be edited.

However, AWS-managed policies can be copied to create customer-managed policies, so they can be used as templates for the start of a customer-managed policy.

https://docs.aws.amazon.com/IAM/latest/UserGuide/access_policies_manage-edit.html

882) Amazon EC2 Auto Scaling offers what service?

- A. It manages the vertical scaling of EC2 instances
- B. It manages the horizontal scaling of EC2 instances
- C. It manages the software patching of EC2 instances
- D. It manages the rightsizing of EC2 instances

Correct Answer: B

Auto Scaling is a service that allows users to automatically scale the EC2 resources in or out, or horizontally, according to the conditions or by manual intervention. It is a seamless process to scale the EC2 instances. It does not scale instances vertically, which would involve changing the size of an existing instance.

<https://docs.aws.amazon.com/autoscaling/ec2/userguide/what-is-amazon-ec2-auto-scaling.html>

883) Which method of accessing AWS offers a user-friendly, intuitive graphical user interface?

- A. AWS Management Console
- B. AWS Command Line Interface (CLI)
- C. Application Programming Interfaces (APIs)
- D. AWS Software Development Kits (SDKs)

Correct Answer: A

The most common way most users initially become familiar with AWS services is through the AWS management console.

The console is easy to use and can be accessed in a web browser from anywhere with an internet connection. It also allows for graphical representations of your infrastructure, such as monitoring graphs or colorful status indicators. Most tasks can be completed using the console, but it does require a person to actually go through the steps manually. In other words, it's not the ideal tool for task automation or for applications to utilize AWS services directly.

884) What are features of Amazon QuickSight? (Choose 3 answers)

- A. Create detailed visualizations.
- B. Analyze datasets from outside sources.
- C. Share dashboards with anyone regardless of AWS knowledge.
- D. Update visualizations in real-time based on streaming data

Correct Answer: ABC

QuickSight is designed to help users easily visualize and explore their data, and it allows them to bring in data from a variety of sources, including AWS and outside sources. Additionally, QuickSight provides robust sharing and collaboration features that make it easy to share dashboards with others.

However, Quicksight visualizations are not updated in real-time based on streaming data.

<https://docs.aws.amazon.com/quicksight/latest/user/welcome.html>

885) Which AWS database service improves application performance by storing data in memory?

- A. Amazon RDS
- B. Amazon ElastiCache
- C. Amazon DynamoDB
- D. Amazon Aurora

Correct Answer: *B*

While the other database options store data in long-term storage, such as hard drives or solid-state disks, ElastiCache works with two databases that store information in memory.

886) Which AWS storage solution is best for applications that scale across multiple instances, allowing for parallel access of data?

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

Correct Answer: C

887) Which AWS solution provides an inventory of an account's AWS resources, simplifies auditing resource configuration, provides a configuration history, and notifies you when resource configurations change?

- A. AWS Config
- B. AWS Trusted Advisor
- C. AWS Auto Scaling
- D. Amazon CloudFront

Correct Answer: A

AWS Config gives you inventory of your AWS resources lets you audit resource configuration, history, and notifies you when resource configurations change.

888) Which AWS solution allows you to protect your VPCs from common network threats by implementing fine-grained firewall rules, enabling you to control which traffic is permitted and which should be blocked?

- A. AWS Network Firewall
- B. Amazon GuardDuty
- C. AWS Shield
- D. AWS KMS

Correct Answer: A

AWS Network Firewalls allow you to protect your VPCs from common network threats by implementing fine-grained firewall rules, enabling you to control which traffic is permitted and which should be blocked.

889) Which of the following AWS Support plans is free and automatically included with all AWS accounts?

- A. Basic
- B. Developer
- C. Enterprise On-Ramp
- D. Business

Correct Answer: A

The Basic plan is free and included with all AWS accounts. The other plans all have monthly costs.

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

890) You have deployed a small web app to your cloud service provider's server. You then deploy a second copy of the app into a second availability zone, and a third copy in a third availability zone.
What are you achieving with these steps?

- A. High availability
- B. Agility
- C. On-demand resourcing
- D. Consumption-based metering

Correct Answer: A

The hypothetical scenario above is an example of high availability. The load balancer will evenly distribute traffic between the two instances in each availability zone to ensure all traffic is handled appropriately.

891) Which AWS storage option must be attached to an EC2 instance?

- A. Amazon FSx
- B. Amazon EFS
- C. Amazon S3
- D. Amazon EBS

Correct Answer: D

One of the caveats with EBS is that it must be attached to an EC2 instance.

892) Which AWS solution provides a fully-managed service for real-time processing of streaming data on a massive scale?

- A. Amazon Kinesis
- B. AWS Data Pipeline
- C. AWS CloudHSM
- D. Amazon Elastic Compute Cloud

Correct Answer: A

Amazon Kinesis is a fully managed service for real-time processing of streaming data at massive scale. Amazon Kinesis can collect and process hundreds of terabytes of data per hour from hundreds of thousands of sources, allowing you to easily write applications that process information in real-time from sources such as web site click-streams, marketing, and financial information, manufacturing instrumentation and social media, and operational logs and metering data.

<http://docs.aws.amazon.com/mobile/sdkforandroid/developerguide/kinesis.html>

893) In designing a cloud solution that will be deployed on the AWS cloud, a company wants to make sure its customers' experience is minimally affected by any cloud resource failure.

Which of the following benefits of cloud computing should the company prioritize in its design plan?

- A. Economy of scale
- B. High availability
- C. The principle of least privilege
- D. Elasticity

Correct Answer: *B*

With high availability, your cloud-based applications can provide a continuous user experience with no apparent downtime even when things go wrong.

894) Which network component serves as a virtual firewall that controls the traffic for one or more Amazon EC2 instances?

- A. Network Access Control Lists (NACLs)
- B. Elastic Network Interfaces (ENIs)
- C. Transit Gateways
- D. Security Groups

Correct Answer: D

A security group acts as a virtual firewall that controls the traffic for one or more Amazon EC2 instances. When you launch an instance, you associate one or more security groups with the instance. You add rules to each security group that allow traffic to or from its associated instances.

<http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/using-network-security.html>

895) Which of the following AWS services makes it possible to avoid including hardcoded credentials in cloud applications?

- A. AWS KMS
- B. AWS Secrets Manager
- C. Amazon Redshift
- D. AWS Identity and Access Management (IAM)

Correct Answer: B

To automate the usage of passwords and usernames, AWS offers Secrets Manager, which can remove the hardcoded username or password from servers, databases and other application resources.

<https://docs.aws.amazon.com/secretsmanager/latest/userguide/intro.html>

896) Which AWS service allows you to define logically isolated, virtual network within the AWS cloud?

- A. AWS Direct Connect
- B. Amazon CloudFront
- C. Amazon Virtual Private Cloud (VPC)
- D. AWS Cloud Map

Correct Answer: C

Amazon's Virtual Private Cloud service enables you to define a virtual network in your own logically isolated area within the AWS cloud. You can launch your AWS resources, such as instances, into your own virtual private cloud, and it will closely resemble a traditional network that you might operate in your own data center.

<http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/using-vpc.html>

897) Which of the following services helps customers by recommending security best practices in AWS?

- A. CloudTrail
- B. AWS Config
- C. CloudWatch
- D. Trusted Advisor

Correct Answer: D

Trusted Advisor is related to the implementation of security best practices in AWS. CloudTrail, AWS Config, and CloudWatch are used to trace the origins of specific events.

<https://aws.amazon.com/premiumsupport/technology/trusted-advisor/>

898) What is the primary use case for Amazon EMR?

- A. Data-sensitive storage
- B. Data-intensive processing tasks
- C. Encryption
- D. authentication

Correct Answer: B

Using Amazon EMR, you can instantly provision as much or as little capacity as you like to perform **data-intensive tasks** for applications such as web indexing, data mining, log file analysis, machine learning, financial analysis, scientific simulation, and bioinformatics research. Amazon EMR lets you focus on crunching or analyzing your data without having to worry about time-consuming set-up, management or tuning of Hadoop clusters or the compute capacity upon which they sit.

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

899) What is the overall purpose of AWS Trusted Advisor?

- A. Recommend improvements based on AWS best practices
- B. Monitor resource and user compliance based on pre-created or custom configuration policies
- C. Enforce security requirements related to user identity and access management
- D. Gather continuous performance data to provide detailed reporting and monitor key performance thresholds

Correct Answer: A

The purpose of AWS Trusted Advisor is to recommend improvements for a user's account based on AWS best practices. The other choices are the general purpose of other services, such as AWS IAM, AWS Config, and AWS CloudWatch. AWS Trusted Advisor does provide best practice recommendations related to performance and security, but does not continuously gather data for detailed reporting, or enforce authentication or authorization policies.

900) A company needs to connect its cloud environment to an on-premises application as quickly as possible. Management is satisfied with an encrypted network connection over the public internet that may experience higher amounts of latency. Which AWS solution will meet the company's requirements?

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

Correct Answer: A

You can connect your VPC to remote networks by using a VPN connection. You can create an IPsec, hardware VPN connection between your VPC and your remote network. On the AWS side of the VPN connection, a virtual private gateway provides two VPN endpoints for automatic failover. You configure your customer gateway, which is the physical device or software application on the remote side of the VPN connection. A VPN connection is the fastest way to complete the connection between on-premises computing and your VPC. However, VPN is not as reliable or as fast as Direct Connect.

https://docs.aws.amazon.com/vpn/latest/s2svpn/VPC_VPN.html

901) Which pillar of the AWS Well-Architected Framework includes the best practices of organize, prepare, operate, and evolve?

- A. Operational excellence
- B. Reliability
- C. Performance efficiency
- D. Sustainability

Correct Answer: A

902) Your company is designing a search tool to query documents within your company's library of past blogs. Which service might you employ to best help with keyword search?

- A. Amazon Comprehend
- B. Amazon Kendra
- C. Amazon Elasticsearch
- D. Amazon Athena

Correct Answer: B

Amazon Kendra is an intelligent search service powered by machine learning (ML). Kendra reimagines enterprise search for your websites and applications so your employees and customers can easily find the content they're looking for, even when it's scattered across multiple locations and content repositories within your organization.

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

903) Which of the following is one of the pillars of the AWS Well-Architected Framework?

- A. Efficiency and redundancy
- B. High availability
- C. Operational excellence
- D. Business optimization

Correct Answer: C

Well Architected Framework 6 Pillars

- 1) Operational Excellence
- 2) Security
- 3) Reliability
- 4) Performance Efficiency
- 5) Cost Optimization
- 6) Sustainability

904) A company has multiple departments. The company must charge each department for its exact AWS Cloud usage, including data transfer costs.

How can the company determine these costs by department?

- A. Use one AWS account for each department.
- B. Use cost allocation tags on services that are used the most often.
- C. Use AWS Trusted Advisor.
- D. Use Savings Plans.

Correct Answer: B

Cost allocation tags allow you to assign metadata to your AWS resources, such as EC2 instances, S3 buckets, or RDS databases. By using cost allocation tags, you can categorize your resources by department, project, or any other relevant criteria. This enables you to track and allocate costs accurately based on these tags

905) An ecommerce company has Amazon EC2 instances running as web servers. There is a predictable pattern of peak traffic load that occurs two times each day, always at the same time. The EC2 instances are idle for the remainder of the day.

What is the MOST cost-effective way to manage these resources while maintaining fault tolerance?

- A. Use an Auto Scaling group to scale resources in and out based on demand.
- B. Purchase Reserved Instances to ensure peak capacity at all times.
- C. Write a cron job to stop the EC2 instances when the traffic demand is low.
- D. Write a script to vertically scale the EC2 instances during peak traffic demand.

Correct Answer: A

The most cost-effective way to manage the resources while maintaining fault tolerance is to use an Auto Scaling group. This will automatically scale the number of Amazon EC2 instances up or down based on demand.

906) A company wants to integrate its online shopping website with social media login credentials. Which AWS service can the company use to make this integration?

- A. AWS Directory Service
- B. AWS Identity and Access Management (IAM)
- C. Amazon Cognito
- D. AWS IAM Identity Center (AWS Single Sign-On)

Correct Answer: C

With Amazon Cognito, you can add user sign-up and sign-in features and control access to your web and mobile applications. Amazon Cognito provides an identity store that scales to millions of users, supports social and enterprise identity federation, and offers advanced security features to protect your consumers and business. Built on open identity standards, Amazon Cognito supports various compliance regulations and integrates with frontend and backend development resources.

907) A company needs to create graphs that show historical and current costs for the company's AWS account. Which AWS service or tool provides this functionality?

- A. AWS Config
- B. AWS Cost and Usage Report
- C. AWS Budgets
- D. AWS Cost Explorer

Correct Answer: D

AWS Cost Explorer is a service that allows a company to view and analyze their AWS costs and usage. It provides a wide range of cost and usage reports, including a cost graph that shows the historical and current costs for the company's AWS account. This service allows the company to view costs by service, by tag, by time, by linked account, and by other dimensions. Cost Explorer also enables the company to set custom budgets, alerts and to view trends and forecasts.

908) A company acquired another corporation. The company now has two AWS accounts. Which AWS service or tool can the company use to consolidate the billing for these two accounts?

- A. AWS Systems Manager
- B. AWS Organizations
- C. AWS License Manager
- D. Cost Explorer

Correct Answer: B

AWS Organizations is an account management service that enables you to consolidate multiple AWS accounts into an organization that you create and centrally manage. AWS Organizations includes account management and consolidated billing capabilities that enable you to better meet the budgetary, security, and compliance needs of your business.

909) Which AWS Support plans provide a complete set of AWS Trusted Advisor checks?

- A. AWS Business Support and AWS Basic Support
- B. AWS Enterprise Support and AWS Business Support
- C. AWS Enterprise Support and AWS Developer Support
- D. AWS Business Support and AWS Developer Support

Correct Answer: B

AWS Trusted Advisor is a service that provides a set of best practices and recommendations for AWS customers to optimize their AWS usage and reduce costs. The complete set of Trusted Advisor checks is available with the AWS Enterprise Support and AWS Business Support plans. These plans provide a complete set of checks across all categories, including security, performance, and cost optimization.

910) Which of the following is a method for building a highly available application on AWS?

- A. Place an Independent copy of the application in two or more Availability Zones.
- B. Place codependent components of the application in two or more Availability Zones
- C. Run one version of the application in one Availability Zone and run an earlier version of the application in a second Availability Zone.
- D. Deploy two copies of the application in a single Availability Zone.

Correct Answer: A

911) Which statement is an AWS Cloud best practice that focuses on the elasticity and agility of cloud computing?

- A. Provision capacity based on past usage and theoretical peaks.
- B. Dynamically scale to meet usage demands.
- C. Build the application and infrastructure in a data center that grants physical access.
- D. Break apart the application into loosely coupled components.

Correct Answer: B

<https://wa.aws.amazon.com/wellarchitected/2020-07-02T19-33-23/wat.concept.elasticity.en.html>

912) Which AWS service could an administrator use to provide desktop environments for several employees?

- A. AWS Organizations
- B. AWS Fargate
- C. AWS WAF
- D. AWS Workspaces

Correct Answer: D

"Amazon WorkSpaces offers an easy way to provide a cloud-based desktop experience to your end users." <https://docs.aws.amazon.com/workspaces/index.html>

913) A company simulates workflows to review and validate that all processes are effective and that staff are familiar with the processes.

Which design principle of the AWS Well-Architected Framework is the company following with this practice?

- A. Perform operations as code.
- B. Refine operation procedures frequently.
- C. Make frequent, small, reversible changes.
- D. Structure the company to support business outcomes.

Correct Answer: B

"Refine operations procedures frequently: As you use operations procedures, look for opportunities to improve them. As you evolve your workload, evolve your procedures appropriately. Set up regular game days to review and validate that all procedures are effective and that teams are familiar with them."

<https://wa.aws.amazon.com/wat.pillar.operationalExcellence.en.html>

914) According to the AWS shared responsibility model, the customer is responsible for applying the latest security updates and patches for which of the following?

- A. Amazon DynamoDB
- B. Amazon EC2 instances
- C. Amazon RDS instances
- D. Amazon S3

Correct Answer: B

915) Which cloud computing advantage is a company applying when it uses AWS Regions to increase application availability to users in different countries?

- A. Pay-as-you-go pricing
- B. Capacity forecasting
- C. Economies of scale
- D. Global reach

Correct Answer: D

"Go global in minutes – Easily deploy your application in multiple regions around the world with just a few clicks. This means you can provide lower latency and a better experience for your customers at minimal cost."

<https://docs.aws.amazon.com/whitepapers/latest/aws-overview/six-advantages-of-cloud-computing.html>

916) Which option is an advantage of AWS Cloud computing that minimizes variable costs?

- A. High availability
- B. Economies of scale
- C. Global reach
- D. Agility

Correct Answer: B

Economies of scale is an advantage of AWS Cloud computing that minimizes variable costs. AWS Cloud computing allows customers to pay only for the resources they use, and as they scale their usage up or down, their costs also scale. This allows customers to take advantage of the economies of scale that come with using a large, shared infrastructure. AWS can spread the fixed costs of running a large, global infrastructure across many customers, which allows them to offer lower variable costs for compute, storage, and other services.

- A. High availability: High availability refers to a system or service that is always operational and accessible to users. It does not minimize variable costs.
- B. C. Global reach: Global reach refers to the ability to access AWS services from anywhere around the world. It does not minimize variable costs.
- C. D. Agility: Agility refers to the ability to quickly and easily provision, scale, and manage resources. It does not minimize variable costs.

917) Which action will help increase security in the AWS Cloud?

- A. Enable programmatic access for all IAM users.
- B. Use IAM users instead of IAM roles to delegate permissions.
- C. Rotate access keys on a reoccurring basis.
- D. Use inline policies instead of customer managed policies.

Correct Answer: C

"Regularly rotating long-term credentials helps you familiarize yourself with the process. This is useful in case you are ever in a situation where you must rotate credentials, such as when an employee leaves your company. We recommend that you use IAM access last used information to rotate and remove access keys safely"

<https://docs.aws.amazon.com/IAM/latest/UserGuide/best-practices.html#rotate-credentials>

918) A user wants to transport data between AWS and an on-premises environment using a private network connection.

Which AWS service or feature can be used to meet these requirements?

- A. NAT gateway
- B. AWS Direct Connect
- C. Amazon VPC
- D. Internet gateway

Correct Answer: B

"AWS Direct Connect is a networking service that provides an alternative to using the internet to connect to AWS. Using AWS Direct Connect, data that would have previously been transported over the internet is delivered through a private network connection between your facilities and AWS. In many circumstances, private network connections can reduce costs, increase bandwidth, and provide a more consistent network experience than internet-based connections."

<https://aws.amazon.com/directconnect/faqs/?nc=sn&loc=6>

919) Which AWS service can serve a static website?

- A. Amazon S3
- B. Amazon Route 53
- C. Amazon QuickSight
- D. AWS X-Ray

Correct Answer: A

Amazon S3 (Simple Storage Service) is an object storage service that can be used to store and retrieve any amount of data, at any time, from anywhere on the web. It can be used to serve a static website. By creating a new bucket in Amazon S3, and then uploading the files for your website to the bucket, you can make your website available to the world. You can also configure the bucket to act as a static website host. Once your website is hosted on Amazon S3, you can use Amazon Route 53 to route traffic to your website.

- B. Amazon Route 53: Amazon Route 53 is a highly available and scalable Domain Name System (DNS) service, it does not host websites.
- C. Amazon QuickSight: Amazon QuickSight is a business intelligence service, it does not host websites.
- D. AWS X-Ray: AWS X-Ray is a service that allows customers to analyze and debug their applications, it does not host websites.

920) A large company has a workload that requires hardware to remain on premises. The company wants to use the same management and control plane services that it currently uses on AWS.

Which AWS service should the company use to meet these requirements?

- A. AWS Device Farm
- B. AWS Fargate
- C. AWS Outposts
- D. AWS Ground Station

Correct Answer: C

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

"Truly consistent hybrid experience Use the same hardware infrastructure, APIs, tools, and management controls available in the cloud to provide a truly consistent developer and IT operations experience. "

921) Which of the following is included within the security pillar of the AWS Well-Architected Framework?

- A. Identity federation
- B. Data protection
- C. Incident reporting
- D. Disaster recovery

Correct Answer: B

<https://docs.aws.amazon.com/wellarchitected/latest/security-pillar/welcome.html>

922) A company has been storing monthly reports in an Amazon S3 bucket. The company exports the report data into comma-separated values (.csv) files. A developer wants to write a simple query that can read all of these files and generate a summary report.

Which AWS service or feature should the developer use to meet these requirements with the LEAST amount of operational overhead?

- A. Amazon S3 Select
- B. Amazon Athena
- C. Amazon Redshift
- D. Amazon EC2

Correct Answer: B

Amazon Athena is an interactive query service that makes it easy to analyze data in Amazon S3 using standard SQL. The developer can use it to write a simple query that can read all of the .csv files in the Amazon S3 bucket and generate a summary report. Athena uses Presto, an open-source query engine, to perform the queries, and it does not require any infrastructure to be provisioned or managed. This means that the developer can use it with the least amount of operational overhead.

923) A company wants the ability to accommodate peak application usage without purchasing equipment for on-premises data centers.

Which AWS Cloud benefit is the company seeking?

- A. High availability
- B. Security
- C. Reliability
- D. Elasticity

Correct Answer: D

Elasticity is the ability of a system to automatically provision and de-provision resources based on the changing workload demands. AWS provides a variety of services that can be scaled up or down quickly and automatically, allowing companies to adjust their computing resources as needed to accommodate fluctuations in application usage. This means that companies can avoid over-provisioning resources and paying for unused capacity, and also can handle peak workloads without purchasing additional hardware.

924) Which of the following are pillars of the AWS Well-Architected Framework? (Choose two.)

- A. Availability
- B. Reliability
- C. Scalability
- D. Responsive design
- E. Operational excellence

Correct Answer: BE

The Well-Architected Framework is based on six pillars:

Operational excellence
Security
Reliability
Performance efficiency
Cost optimization
Sustainability

925) Which AWS service provides highly durable object storage?

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

Correct Answer: A

"Amazon S3 is object storage built to store and retrieve any amount of data from anywhere. S3 is a simple storage service that offers industry leading durability, availability, performance, security, and virtually unlimited scalability at very low costs."
<https://aws.amazon.com/s3/faqs/?nc=sn&loc=7>

926) Which AWS database service providers in-memory data storage?

- A. Amazon DynamoDB
- B. Amazon ElastiCache
- C. Amazon RDS
- D. Amazon Timestream

Correct Answer: B

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. Ref link: <https://aws.amazon.com/nosql/in-memory/#:~:text=Amazon%20ElastiCache%20for%20Memcached&text=ElastiCache%20for%20Memcached%20is%20fully,Tech%2C%20and%20E-commerce>.

927) A company needs a content delivery network that provides secure delivery of data, videos, applications, and APIs to users globally with low latency and high transfer speeds.

Which AWS service meets these requirements?

- A. Amazon CloudFront
- B. Elastic Load Balancing
- C. Amazon S3
- D. Amazon Elastic Transcoder

Correct Answer: A

"Amazon CloudFront is a web service that gives businesses and web application developers an easy and cost effective way to distribute content with low latency and high data transfer speeds. Like other AWS services, Amazon CloudFront is a self-service, pay-per-use offering, requiring no long term commitments or minimum fees. With CloudFront, your files are delivered to end-users using a global network of edge locations."

<https://aws.amazon.com/cloudfront/faqs/?nc=sn&loc=5&dn=2>

928) Which of the following are design principles for reliability in the AWS Cloud? (Choose two.)

- A. Build architectures with tightly coupled resources.
- B. Use AWS Trusted Advisor to meet security best practices.
- C. Use automation to recover immediately from failure.
- D. Right size Amazon EC2 instances to ensure optimal performance.
- E. Simulate failures to test recovery processes.

Correct Answer: CE

Manage change in automation: Changes to your infrastructure should be made using automation. The changes that need to be managed include changes to the automation, which then can be tracked and reviewed.

Test recovery procedures: In an on-premises environment, testing is often conducted to prove that the workload works in a particular scenario. Testing is not typically used to validate recovery strategies. In the cloud, you can test how your workload fails, and you can validate your recovery procedures.

929) Which AWS service is a cloud security posture management (CSPM) service that aggregates alerts from various AWS services and partner products in a standardized format?

- A. AWS Security Hub
- B. AWS Trusted Advisor
- C. Amazon EventBridge
- D. Amazon GuardDuty

Correct Answer: A

930) A company wants to use the AWS Cloud to define its entire infrastructure as code. The company wants to limit human error and activate consistent responses to events.

Which pillar of the AWS Well-Architected Framework does this plan support?

- A. Security
- B. Operational excellence
- C. Cost optimization
- D. Reliability

Correct Answer: B

"Perform operations as code: In the cloud, you can apply the same engineering discipline that you use for application code to your entire environment. You can define your entire workload (applications, infrastructure) as code and update it with code. You can implement your operations procedures as code and automate their run process by initiating them in response to events. By performing operations as code, you limit human error and achieve consistent responses to events."

<https://docs.aws.amazon.com/wellarchitected/latest/framework/oe-design-principles.html>

931) A developer wants AWS users to access AWS services by using temporary security credentials.

Which AWS service or feature should the developer use to provide these credentials?

- A. IAM policies
- B. IAM user groups
- C. AWS Security Token Service (AWS STS)
- D. AWS IAM Identity Center (AWS Single Sign-On)

Correct Answer: C

"AWS provides AWS Security Token Service (AWS STS) as a web service that enables you to request temporary, limited-privilege credentials for users. "

<https://docs.aws.amazon.com/STS/latest/APIReference/welcome.html>

932) Which of the following is an architectural design principle of the AWS Well-Architected Framework?

- A. Loosely couple components
- B. Build monolithic systems
- C. Scale vertically, not horizontally
- D. Use third-party software

Correct Answer: A

933) What does the Amazon S3 Intelligent-Tiering storage class offer?

- A. Payment flexibility by reserving storage capacity
- B. Long-term retention of data by copying the data to an encrypted Amazon Elastic Block Store (Amazon EBS) volume
- C. Automatic cost savings by moving objects between tiers based on access pattern changes
- D. Secure, durable, and lowest cost storage for data archival

Correct Answer: C

934) How does the AWS Cloud help companies build agility into their processes and cloud infrastructure?

- A. Companies can avoid provisioning too much capacity when they do not know how much capacity is required.
- B. Companies can expand into new geographic regions.
- C. Companies can access a range of technologies to experiment and innovate quickly.
- D. Companies can pay for IT resources only when they use the resources.

Correct Answer: C

935) Which of the following is a recommended design principle of the AWS Well-Architected Framework?

- A. Reduce downtime by making infrastructure changes infrequently and in large increments.
- B. Invest the time to configure infrastructure manually.
- C. Learn to improve from operational failures.
- D. Use monolithic application design for centralization.

Correct Answer: C

936) An Availability Zone consists of:

- A. one or more data centers in a single location.
- B. two or more data centers in multiple locations.
- C. one or more physical hosts in a single data center.
- D. two or more physical hosts in multiple data centers.

Correct Answer: A

937) Which fully managed AWS service assists with the creation, testing, and management of custom Amazon EC2 images?

- A. EC2 Image Builder
- B. Amazon Machine Image (AMI)
- C. AWS Launch Wizard
- D. AWS Elastic Beanstalk

Correct Answer: A

938) Which AWS service provides recommendations to help users optimize costs and follow AWS best practices?

- A. AWS Trusted Advisor
- B. AWS Service Catalog
- C. AWS Ground Station
- D. Amazon GuardDuty

Correct Answer: A

"AWS Trusted Advisor provides recommendations that help you follow AWS best practices. Trusted Advisor evaluates your account by using checks. These checks identify ways to optimize your AWS infrastructure, improve security and performance, reduce costs, and monitor service quotas."

<https://aws.amazon.com/premiumsupport/technology/trusted-advisor/>

939) Which AWS service provides a cloud-based contact center that scales to support a business of any size?

- A. Amazon Personalize
- B. Amazon Cognito
- C. Amazon Connect
- D. Amazon Lightsail

Correct Answer: C

"With Amazon Connect, you can set up a contact center in minutes that can scale to support millions of customers."

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

940) A financial company needs to centrally manage its AWS accounts and use consolidated billing.

Which AWS service or feature should the company use?

- A. AWS Cost Explorer
- B. AWS Organizations
- C. AWS Billing and Cost Management
- D. AWS Budgets

Correct Answer: B

"AWS Organizations is an account management service that enables you to consolidate multiple AWS accounts into an organization that you create and centrally manage. AWS Organizations includes account management and consolidated billing capabilities that enable you to better meet the budgetary, security, and compliance needs of your business. As an administrator of an organization, you can create accounts in your organization and invite existing accounts to join the organization."

https://docs.aws.amazon.com/organizations/latest/userguide/orgs_introduction.html

941) A company is preparing for an audit and wants documentation that AWS complies with the Payment Card Industry Data Security Standard (PCI DSS).

Where can the company find this documentation?

- A. AWS Artifact
- B. AWS Organizations
- C. AWS Trusted Advisor
- D. AWS Support Center

Correct Answer: A

A. AWS Artifact provides documentation that AWS complies with various compliance programs and certifications, including the Payment Card Industry Data Security Standard (PCI DSS). AWS Artifact allows customers to download compliance reports and other documentation that can be used for audit and compliance purposes.

942) A company stores data in an Amazon S3 bucket.

Which task is the responsibility of AWS?

- A. Configure an S3 Lifecycle policy.
- B. Activate S3 Versioning.
- C. Configure S3 bucket policies.
- D. Protect the infrastructure that supports S3 storage.

Correct Answer: D

AWS is responsible for protecting the infrastructure that runs AWS services in the AWS Cloud. AWS also provides you with services that you can use securely. The effectiveness of our security is regularly tested and verified by third-party auditors as part of the AWS compliance programs

943) Which AWS service allows a user to provision a managed MySQL DB instance?

- A. Amazon DynamoDB
- B. Amazon Redshift
- C. Amazon RDS
- D. AWS Database Migration Service (AWS DMS)

Correct Answer: C

"Amazon Relational Database Service (Amazon RDS) is a collection of managed services that makes it simple to set up, operate, and scale databases in the cloud. Choose from seven popular engines — Amazon Aurora with MySQL compatibility, Amazon Aurora with PostgreSQL compatibility, MySQL, MariaDB, PostgreSQL, Oracle, and SQL Server — and deploy on-premises with Amazon RDS on AWS Outposts."

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

944) Which AWS service should a cloud practitioner use to receive real-time guidance for provisioning resources, based on AWS best practices related to security, cost optimization, and service limits?

- A. AWS Trusted Advisor
- B. AWS Config
- C. AWS Security Hub
- D. AWS Systems Manager

Correct Answer: A

"AWS Trusted Advisor provides recommendations that help you follow AWS best practices. Trusted Advisor evaluates your account by using checks. These checks identify ways to optimize your AWS infrastructure, improve security and performance, reduce costs, and monitor service quotas. You can then follow the recommendations to optimize your services and resources."

<https://aws.amazon.com/premiumsupport/technology/trusted-advisor/>

945) Which AWS service stores graph data in the form of vertices and edges?

- A. Amazon DynamoDB
- B. Amazon RDS
- C. Amazon Quantum Ledger Database (Amazon QLDB)
- D. Amazon Neptune

Correct Answer: D

"Amazon Neptune is a fully managed database service built for the cloud that makes it easier to build and run graph applications. Neptune provides built-in security, continuous backups, serverless compute, and integrations with other AWS services."

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

946) When designing AWS workloads to be operational even when there are component failures, what is an AWS best practice?

- A. Perform quarterly disaster recovery tests.
- B. Place the main component on the us-east-1 Region.
- C. Design for automatic failover to healthy resources.
- D. Design workloads to fit on a single Amazon EC2 instance.

Correct Answer: C

947) A company wants to protect resources that the company hosts on AWS, including Application Load Balancers and Amazon CloudFront distributions. The company wants an AWS service that can provide near real-time visibility into attacks on the company's resources. The service must also have a dedicated AWS team to assist with distributed denial of service (DDoS) attacks.

Which AWS service will meet these requirements?

- A. AWS WAF
- B. AWS Shield Standard
- C. Amazon Macie
- D. AWS Shield Advanced

Correct Answer: D

948) Which AWS Support plan provides customers with access to an AWS technical account manager (TAM)?

- A. AWS Basic Support
- B. AWS Developer Support
- C. AWS Business Support
- D. AWS Enterprise Support

Correct Answer: D

"Designated Technical Account Manager (TAM) to proactively monitor your environment and assist with optimization and coordinate access to programs and AWS experts"

949) Which task is the responsibility of a company that is using Amazon RDS?

- A. Provision the underlying infrastructure.
- B. Create IAM policies to control administrative access to the service.
- C. Install the cables to connect the hardware for compute and storage.
- D. Install and patch the RDS operating system.

Correct Answer: B

The company's AWS account owner or administrator is responsible for setting up the necessary IAM policies to control access to the RDS resources.

950) A company has an application with robust hardware requirements. The application must be accessed by students who are using lightweight, low-cost laptops.

Which AWS service will help the company deploy the application without investing in backend infrastructure or high-end client hardware?

- A. Amazon AppStream 2.0
- B. AWS AppSync
- C. Amazon WorkLink
- D. AWS Elastic Beanstalk

Correct Answer: A

"AppStream 2.0 lets you move your desktop applications to AWS without rewriting them. It's easy to install your applications on AppStream 2.0, set launch configurations, and make your applications available to users. AppStream 2.0 offers a wide selection of configuration options so you can select the instance type and auto-scale parameters that best match your application and end-user requirements. AppStream 2.0 allows you to launch applications in your own network, which means your applications can interact with your existing AWS resources."

951) Which of the following is an AWS value proposition that describes a user's ability to scale infrastructure based on demand?

- A. Speed of innovation
- B. Resource elasticity
- C. Decoupled architecture
- D. Global deployment

Correct Answer: B

Resource elasticity refers to the ability of a system or application to automatically scale resources up or down based on demand. This means that users can quickly add or remove computing resources to match their workload, and pay only for what they use. Resource elasticity is a key advantage of using cloud infrastructure, and is a fundamental aspect of the AWS platform.

952) A company needs to organize its resources and track AWS costs on a detailed level. The company needs to categorize costs by business department, environment, and application.

Which solution will meet these requirements?

- A. Access the AWS Cost Management console to organize resources, set an AWS budget, and receive notifications of unintentional usage.
- B. Use tags to organize the resources. Activate cost allocation tags to track AWS costs on a detailed level.
- C. Create Amazon CloudWatch dashboards to visually organize and track costs individually.
- D. Access the AWS Billing and Cost Management dashboard to organize and track resource consumption on a detailed level.

Correct Answer: B

"Your organization's financial governance might require transparent accounting of costs incurred at the application, business unit, cost center, and team level. Performing cost attribution supported by Cost Allocation Tags provides you the data necessary to accurately attribute the costs incurred by an entity from appropriately tagged resources."

953) Using Amazon Elastic Container Service (Amazon ECS) to break down a monolithic architecture into microservices is an example of:

- A. a loosely coupled architecture.
- B. a tightly coupled architecture.
- C. a stateless architecture.
- D. a stateful architecture.

Correct Answer: A

"Service independence increases an application's resistance to failure. In a monolithic architecture, if a single component fails, it can cause the entire application to fail. With microservices, applications handle total service failure by degrading functionality and not crashing the entire application."

954) Which AWS benefit is demonstrated by on-demand technology services that enable companies to replace upfront fixed expenses with variable expenses?

- A. High availability
- B. Economies of scale
- C. Pay-as-you-go pricing
- D. Global reach

Correct Answer: C

AWS offers a pay-as-you-go pricing model for its technology services, which enables companies to replace upfront fixed expenses with variable expenses. This means that companies only pay for the resources they use and can scale up or down as needed, rather than having to invest in and maintain expensive infrastructure. This pay-as-you-go model can help companies to minimize costs and increase their flexibility.

955) Which AWS service is a key-value database that provides sub-millisecond latency on a large scale?

- A. Amazon DynamoDB
- B. Amazon Aurora
- C. Amazon DocumentDB (with MongoDB compatibility)
- D. Amazon Neptune

Correct Answer: A

"Amazon DynamoDB is a fully managed, serverless, key-value NoSQL database designed to run high-performance applications at any scale. DynamoDB offers built-in security, continuous backups, automated multi-Region replication, in-memory caching, and data import and export tools."

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

956) Which AWS service supports the analysis, investigation, and identification of the root cause of security events and suspicious activities in an AWS account?

- A. Amazon Inspector
- B. Amazon Macie
- C. Amazon Detective
- D. Amazon CloudWatch

Correct Answer: C

Amazon Detective makes it easy to analyze, investigate, and quickly identify the root cause of potential security issues or suspicious activities.

957) A company plans to run its IT infrastructure in the AWS Cloud. The infrastructure must be highly available. The company also must minimize the network latency between servers.

Which deployment scenario will meet these requirements?

- A. Deploy in multiple Availability Zones in multiple AWS Regions.
- B. Deploy in one Availability Zone in one AWS Region
- C. Deploy in multiple AWS Regions. Deploy in one Availability Zone in each Region.
- D. Deploy in multiple Availability Zones in one AWS Region.

Correct Answer: D

958) Which AWS service decouples application components so that the components run independently?

- A. Amazon Simple Notification Service (Amazon SNS)
- B. Amazon Simple Workflow Service (Amazon SWF)
- C. AWS Glue
- D. Amazon Simple Queue Service (Amazon SQS)

Correct Answer: D

959) A company is designing an application. For the data persistence layer, the company wants to use a NoSQL database.

Which AWS service should the company use for the database?

- A. Amazon Redshift
- B. AWS DataSync
- C. Amazon Athena
- D. Amazon DynamoDB

Correct Answer: D

960) Which AWS service keeps track of SSL/TLS certificates, creates new certificates, and processes renewals?

- A. AWS Identity and Access Management (IAM)
- B. AWS Certificate Manager (ACM)
- C. AWS Config
- D. AWS Trusted Advisor

Correct Answer: B

Use AWS Certificate Manager (ACM) to provision, manage, and deploy public and private SSL/TLS certificates for use with AWS services and your internal connected resources. ACM removes the time-consuming manual process of purchasing, uploading, and renewing SSL/TLS certificates.

961) A company needs to process data from satellite communications without managing any infrastructure.

Which AWS service should the company use to meet these requirements?

- A. Amazon CloudWatch
- B. Amazon Aurora
- C. Amazon Athena
- D. AWS Ground Station

Correct Answer: D

AWS Ground Station is a fully managed service that lets you control satellite communications, process data, and scale your operations without having to worry about building or managing your own ground station infrastructure. Satellites are used for a wide variety of use cases, including weather forecasting, surface imaging, communications, and video broadcasts

962) A company wants to run its applications in the AWS Cloud. The company does not have enough staff to maintain and protect its critical business applications.

Which AWS service should the company use to perform these tasks?

- A. AWS Shield
- B. Amazon RDS
- C. AWS Config
- D. AWS Managed Services (AMS)

Correct Answer: D

AMS extends your team with operational capabilities including monitoring, incident management, AWS Incident Detection and Response, security, patch, backup, and cost optimization.

963) A company needs to test a new application that was written in Python. The code will activate when new images are stored in an Amazon S3 bucket. The application will put a watermark on each image and then will store the images in a different S3 bucket.

Which AWS service should the company use to conduct the test with the LEAST amount of operational overhead?

- A. Amazon EC2
- B. AWS Code Deploy
- C. AWS Lambda
- D. Amazon Lightsail

Correct Answer: C

964) A cloud engineer needs to track AWS costs. The cloud engineer also needs to receive event driven alerts when costs exceed specific thresholds.

Which AWS tool provides this functionality?

- A. AWS Cost Explorer
- B. AWS Budgets
- C. Cost allocation tags
- D. AWS Cost and Usage Reports

Correct Answer: B

"Using AWS Budgets, you can set a budget that alerts you when you exceed (or are forecasted to exceed) your budgeted cost or usage amount. You can also set alerts based on your RI or Savings Plans Utilization and Coverage using AWS Budgets."

<https://aws.amazon.com/aws-cost-management/aws-budgets/faqs/>

965) A company wants to migrate its on-premises data warehouse to AWS. The information in the data warehouse is used to populate analytics dashboards.

Which AWS service should the company use for the data warehouse?

- A. Amazon ElastiCache
- B. Amazon Aurora
- C. Amazon RDS
- D. Amazon Redshift

Correct Answer: D

966) A company wants to use machine learning to identify suspicious activities in its AWS account.

Which AWS service provides this functionality?

- A. AWS Shield
- B. Amazon Macie
- C. Amazon Detective
- D. AWS WAF

Correct Answer: C

Amazon Detective makes it easier to analyze, investigate, and quickly identify the root cause of potential security issues or suspicious activities. Amazon Detective automatically collects log data from your AWS resources and uses machine learning, statistical analysis, and graph theory to build a linked set of data that enables you to easily conduct faster and more efficient security investigations

967) A company is hosting a web application in a Docker container on Amazon EC2.

AWS is responsible for which of the following tasks?

- A. Scaling the web application and services developed with Docker
- B. Provisioning or scheduling containers to run on clusters and maintain their availability
- C. Performing hardware maintenance in the AWS facilities that run the AWS Cloud
- D. Managing the guest operating system, including updates and security patches

Correct Answer: C

968) Which options does AWS make available for customers who want to learn about security in the cloud in an instructor-led setting? (Choose two.)

- A. AWS Trusted Advisor
- B. AWS Online Tech Talks
- C. AWS Blog
- D. AWS Forums
- E. AWS Classroom Training

Correct Answer: BE

AWS Online Tech Talks cover a wide range of topics and expertise levels through technical deep dives, demos, customer examples, and live Q&A with AWS experts.

AWS Classroom Training offers live classes with instructors who teach you in-demand cloud skills and best practices using a mix of presentations, discussion, and hands-on labs

969) Which AWS service will help a company identify the user who deleted an Amazon EC2 instance yesterday?

- A. Amazon CloudWatch
- B. AWS Trusted Advisor
- C. AWS CloudTrail
- D. Amazon Inspector

Correct Answer: C

970) A company is configuring its AWS Cloud environment. The company's administrators need to group users together and apply permissions to the group.

Which AWS service or feature can the company use to meet these requirements?

- A. AWS Organizations
- B. Resource groups
- C. Resource tagging
- D. AWS Identity and Access Management (IAM)

Correct Answer: D

An IAM user group is a collection of IAM users. User groups let you specify permissions for multiple users, which can make it easier to manage the permissions for those users

971) Which statement describes a characteristic of the AWS global infrastructure?

- A. Edge locations contain multiple AWS Regions
- B. AWS Regions contain multiple Regional edge caches
- C. Availability Zones contain multiple data centers
- D. Each data center contains multiple edge locations

Correct Answer: C

An Availability Zone (AZ) is one or more discrete data centers with redundant power, networking, and connectivity in an AWS Region

972) A company has an online shopping website and wants to store customers' credit card data. The company must meet Payment Card Industry (PCI) standards.

Which service can the company use to access AWS compliance documentation?

- A. Amazon Cloud Directory
- B. AWS Artifact
- C. AWS Trusted Advisor
- D. Amazon Inspector

Correct Answer: B

AWS Artifact, available in the console, is a self-service audit artifact retrieval portal that provides our customers with on-demand access to AWS' compliance documentation and AWS agreements. You can use AWS Artifact Reports to download AWS security and compliance documents, such as AWS ISO certifications, Payment Card Industry (PCI), and System and Organization Control (SOC) reports

973) Which AWS service can a company use to perform complex analytical queries?

- A. Amazon RDS
- B. Amazon DynamoDB
- C. Amazon Redshift
- D. Amazon ElastiCache

Correct Answer: C

Tens of thousands of customers today rely on Amazon Redshift to analyze exabytes of data and run complex analytical queries, making it a widely used cloud data warehouse. Run and scale analytics in seconds on all your data without having to manage your data warehouse infrastructure.

974) Where can AWS users review answers to frequently asked questions about security in the AWS Cloud?

- A. AWS Trusted Advisor
- B. AWS Knowledge Center
- C. AWS Support Center
- D. AWS Artifact

Correct Answer: B

The AWS Knowledge Center is a central resource for users to find answers to frequently asked questions and learn more about AWS services. It includes a range of topics, including security, and provides detailed information, best practices, and other guidance to help users get the most out of AWS.

975) Which AWS service or feature can a company use to estimate AWS costs before provisioning workloads?

- A. AWS Pricing Calculator
- B. AWS Cost and Usage Report
- C. Cost Explorer
- D. AWS Budgets

Correct Answer: A

AWS Pricing Calculator is a web-based planning tool that you can use to create estimates for your AWS use cases. You can use it to model your solutions before building them, explore the AWS service price points, and review the calculations behind your estimates. You can use it to help you plan how you spend, find cost saving opportunities, and make informed decisions when using Amazon Web Services

976) An application that is hosted on Amazon EC2 has a steady and consistent workload. The application will operate for at least 1 year.

What is the MOST cost-effective instance purchasing option to meet these requirements?

- A. Spot Instances
- B. Reserved Instances
- C. On-Demand Instances
- D. Dedicated Hosts

Correct Answer: B

To meet the requirements of having a steady and consistent workload on an Amazon EC2 instance that will operate for at least 1 year, the most cost-effective instance purchasing option is Reserved Instances (RIs).

977) A company wants to design a reliable web application that is hosted on Amazon EC2.

Which approach will achieve this goal?

- A. Launch large EC2 instances in the same Availability Zone
- B. Spread EC2 instances across more than one security group
- C. Spread EC2 instances across more than one Availability Zone.
- D. Use an Amazon Machine Image (AMI) from AWS Marketplace.

Correct Answer: C

This mentions reliability, which is part of the AWS Well architected framework. Which means been able to automatically recover from failures, therefor, we need more availability zones.

978) Which AWS service should a company use to provision, manage, and deploy SSL/TLS certificates?

- A. AWS Secrets Manager
- B. Amazon Inspector
- C. AWS CodeDeploy
- D. AWS Certificate Manager (ACM)

Correct Answer: D

Use AWS Certificate Manager (ACM) to provision, manage, and deploy public and private SSL/TLS certificates for use with AWS services and your internal connected resources. ACM removes the time-consuming manual process of purchasing, uploading, and renewing SSL/TLS certificates

979) A company provides Amazon Workspaces to its remote employees. The company wants to prevent employees from using their virtual desktops to visit specific websites that are known to be malicious.

Which AWS service should the company use to meet this requirement?

- A. AWS Shield Advanced
- B. Amazon Route 53
- C. Amazon GuardDuty
- D. AWS Network Firewall

Correct Answer: D

AWS Network Firewall is a service that allows a company to create and manage a set of firewall rules that can be used to control network traffic.

AWS Network Firewall allows customers to filter traffic to and from Amazon WorkSpaces instances based on the source and destination IP address, ports, and protocols.

- A. AWS Shield Advanced: AWS Shield Advanced is a service that provides DDoS protection for your applications, it is not related to web filtering.
- B. Amazon Route 53: Amazon Route 53 is a highly available and scalable Domain Name System (DNS) service, it is not related to web filtering.
- C. Amazon GuardDuty: Amazon GuardDuty is a threat detection service that uses machine learning to identify potentially malicious activity in your AWS accounts, it is not related to web filtering.
- D. AWS Network Firewall: AWS Network Firewall is a service that allows a company to create and manage a set of firewall rules that can be used to control network traffic. It allows customers to filter traffic to and from Amazon WorkSpaces instances based on the source and destination IP address, ports, and protocols.

980) A company wants to build an application that uses AWS Lambda to run Python code.

Under the AWS shared responsibility model, which tasks will be the company's responsibility? (Choose two.)

- A. Management of the underlying infrastructure
- B. Management of the operating system.
- C. Writing the business logic code.
- D. Installation of the computer language runtime.
- E. Providing AWS Identity and Access Management (IAM) access to the Lambda service.

Correct Answer: CE

981) A large retail company wants to use an AWS service to process clickstream data from the company's ecommerce website. The company wants to collect and analyze the streaming data in real time.

Which AWS service meets these requirements?

- A. Amazon Kinesis
- B. Amazon Athena
- C. Amazon CloudFront
- D. AWS Data Exchange

Correct Answer: A

Amazon Kinesis is a fully managed service that allows you to collect, process, and analyze streaming data in real-time. This service can be used to process clickstream data from an ecommerce website in real-time.

982) A company is developing an application that the company will host on Amazon EC2 instances. The application must be available 24 hours a day, 7 days a week. The company needs a scalable, highly available cloud architecture to support the application.

Which guidelines should the company apply in its design to meet these requirements? (Choose two.)

- A. Use EC2 Spot Instances
- B. Use Multi-AZ deployments.
- C. Use Auto Scaling groups
- D. Use AWS Backup.
- E. Use EC2 Reserved Instances.

Correct Answer: BC

- B. Use Multi-AZ deployments. <https://docs.aws.amazon.com/whitepapers/latest/real-time-communication-on-aws/use-multiple-availability-zones.html>
- C. Use Auto Scaling groups <https://docs.aws.amazon.com/whitepapers/latest/real-time-communication-on-aws/dynamic-scaling-with-aws-lambda-amazon-route-53-and-aws-auto-scaling.html>

983) Which AWS service helps users audit API activity across their AWS account?

- A. AWS CloudTrail
- B. Amazon Inspector
- C. AWS WAF
- D. AWS Config

Correct Answer: A

CloudTrail enables auditing, security monitoring, and operational troubleshooting by tracking user activity and API usage. CloudTrail logs, continuously monitors, and retains account activity related to actions across your AWS infrastructure, giving you control over storage, analysis, and remediation actions.

984) Which AWS service should a company use to create a serverless workflow?

- A. Amazon Connect
- B. AWS Lambda
- C. AWS Step Functions
- D. Amazon Elastic Block Store (Amazon EBS)
- E. AWS CodeBuild

Correct Answer: C

AWS Step Functions is a service that allows you to coordinate and build serverless workflows using various AWS services, including AWS Lambda functions. You can use Step Functions to define, run, and visualize workflows that can automate and coordinate tasks, making it a suitable choice for building serverless workflows.

985) A company wants to build a data analytics application that uses Amazon Redshift. The company needs a cost estimate for its future Amazon Redshift usage.

Which AWS tool will provide a high-level cost estimation?

- A. AWS Budgets
- B. AWS Pricing Calculator
- C. AWS Cost Explorer
- D. Saving Plans

Correct Answer: B

AWS Pricing Calculator is a web-based planning tool that you can use to create estimates for your AWS use cases. You can use it to model your solutions before building them, explore the AWS service price points, and review the calculations behind your estimates. You can use it to help you plan how you spend, find cost saving opportunities, and make informed decisions when using Amazon Web Services.

986) Which AWS service gives users the ability to run AWS services on premises?

- A. Amazon CloudFront
- B. AWS Outposts
- C. AWS Global Accelerator
- D. Amazon VPC

Correct Answer: B

An Outpost is a pool of AWS compute and storage capacity deployed at a customer site. AWS operates, monitors, and manages this capacity as part of an AWS Region. You can create subnets on your Outpost and specify them when you create AWS resources such as EC2 instances, EBS volumes, ECS clusters, and RDS instances.

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

987) Which guideline is a well-architected design principle for building cloud applications?

- A. Keep static data closer to compute resources.
- B. Provision resources for peak capacity.
- C. Design for automated recovery from failure.
- D. Use tightly coupled components.

Correct Answer: C

988) Which actions are examples of a company's effort to rightsize its AWS resources to control cloud costs? (Choose two.)

- A. Switch from Amazon RDS to Amazon DynamoDB to accommodate NoSQL datasets.
- B. Base the selection of Amazon EC2 instance types on past utilization patterns.
- C. Use Amazon S3 Lifecycle policies to move objects that users access infrequently to lower-cost storage tiers.
- D. Use Multi-AZ deployments for Amazon RDS.
- E. Replace existing Amazon EC2 instances with AWS Elastic Beanstalk.

Correct Answer: BC

989) A company is using AWS Identity and Access Management (IAM).

Who can manage the access keys of the AWS account root user?

- A. IAM users in the same account that have been granted permission
- B. IAM roles in any account that have been granted permission
- C. IAM users and roles that have been granted permission
- D. The AWS account owner

Correct Answer: D

<https://docs.aws.amazon.com/accounts/latest/reference/root-user-access-key.html>

990) A company needs a managed NFS file system that the company can use with its AWS compute resources.

Which AWS service or feature will meet these requirements?

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

Correct Answer: D

Amazon Elastic File System (EFS) is designed to provide serverless, fully elastic file storage that lets you share file data without provisioning or managing storage capacity and performance.

991) An application requires a database that offers consistent performance and latency that can be measured in single-digit milliseconds.

Which AWS service meets these requirements?

- A. Amazon DynamoDB
- B. Amazon RDS
- C. Amazon Redshift
- D. Amazon EMR

Correct Answer: A

Amazon DynamoDB is designed to run high-performance, internet-scale applications that would overburden traditional relational databases. With over ten years of pioneering innovation investment, Amazon DynamoDB offers limitless scalability with consistent single-digit millisecond performance and up to 99.999% availability

992) A company needs to block SQL injection attacks.

Which AWS service or feature provides this functionality?

- A. AWS WAF
- B. Network ACLs
- C. Security groups
- D. AWS Trusted Advisor

Correct Answer: A

AWS WAF is a web application firewall that helps protect web applications from attacks by allowing you to configure rules that allow, block, or monitor (count) web requests based on conditions that you define. These conditions include IP addresses, HTTP headers, HTTP body, URI strings, SQL injection and cross-site scripting.

993) A company wants its Amazon EC2 instances to operate in a highly available environment, even if there is a natural disaster in a particular geographic area.

Which solution achieves this goal?

- A. Use EC2 instances in a single Availability Zone
- B. Use EC2 instances in multiple AWS Regions
- C. Use EC2 instances in multiple edge locations.
- D. Use Amazon CloudFront with the EC2 instances configured as the source.

Correct Answer: B

Using EC2 instances in multiple AWS Regions ensures high availability even in the event of a natural disaster in a particular geographic area. If one region goes down due to a disaster, the instances in other regions will continue to function normally, providing uninterrupted service to customers. This solution provides a higher level of fault tolerance and disaster recovery capability, as compared to using EC2 instances in a single Availability Zone or multiple edge locations.

994) Treating infrastructure as code in the AWS Cloud allows users to:

- A. automate migration of on-premises hardware to AWS data centers.
- B. let a third party automate an audit of the AWS infrastructure.
- C. turn over application code to AWS so it can run on the AWS infrastructure.
- D. automate the infrastructure provisioning process.

Correct Answer: D

Practicing infrastructure as code means applying the same rigor of application code development to infrastructure provisioning. All configurations should be defined in a declarative way and stored in a source control system such as AWS CodeCommit, the same as application code. Infrastructure provisioning, orchestration, and deployment should also support the use of the infrastructure as code.

995) A company's project team needs to simultaneously mount a file system on multiple Amazon EC2 Linux instances. The file system also will be shared across multiple Availability Zones.

Which AWS service will meet these requirements?

- A. Amazon Elastic File System (Amazon EFS)
- B. Amazon S3
- C. Amazon Elastic Block Store (Amazon EBS)
- D. Amazon FSx for Windows File Server

Correct Answer: A

EBS is a high-performance per-instance block storage system designed to act as storage for a single EC2 instance (most of the time)

EFS is a highly scalable file storage system designed to provide flexible storage for multiple EC2 instances

S3 is an object storage system, designed to provide archiving and data control options and to interface with other services beyond EC2. It's also useful for storing static html pages and shared storage for applications

996) A company has a set of ecommerce applications. The applications need to be able to send messages to each other.

Which AWS service meets this requirement?

- A. AWS Auto Scaling
- B. Elastic Load Balancing
- C. Amazon Simple Queue Service (Amazon SQS)
- D. Amazon Kinesis Data Streams

Correct Answer: C

Amazon Simple Queue Service (Amazon SQS) lets you send, store, and receive messages between software components at any volume, without losing messages or requiring other services to be available.

997) A company wants to receive alerts when resources that are launched in the company's AWS account reach 80% of their service quotas.

Which AWS service should the company use to meet this requirement?

- A. AWS CloudTrail
- B. AWS Trusted Advisor
- C. AWS Config
- D. Amazon Inspector

Correct Answer: B

Service quotas are the maximum number of resources that you can create in an AWS account. AWS implements quotas to provide highly available and reliable service to all customers, and protects you from unintentional spend. Trusted Advisor will notify you once you reach more than 80% of a service quota. You can then follow recommendations to delete resources or request a quota increase.

998) Which pillar of the AWS Well-Architected Framework is focused on the ability of a workload to perform its intended function correctly and consistently at the expected time?

- A. Performance efficiency
- B. Operational excellence
- C. Reliability
- D. Security

Correct Answer: C

The Reliability pillar encompasses the ability of a workload to perform its intended function correctly and consistently when it's expected to. This includes the ability to operate and test the workload through its total lifecycle. This paper provides in-depth, best practice guidance for implementing reliable workloads on AWS

999) Which AWS tool acts as a firewall to control traffic in and out of subnets within a VPC?

- A. Security group
- B. Route table
- C. VPC endpoint
- D. Network access control list (ACL)

Correct Answer: D

A network access control list (ACL) allows or denies specific inbound or outbound traffic at the subnet level. You can use the default network ACL for your VPC, or you can create a custom network ACL for your VPC with rules that are similar to the rules for your security groups in order to add an additional layer of security to your VPC.

1000) A company needs to use machine learning and pattern matching to identify and protect sensitive data that the company stores in the AWS Cloud.

Which AWS service will meet these requirements?

- A. Amazon Inspector
- B. Amazon Macie
- C. Amazon GuardDuty
- D. AWS Audit Manager

Correct Answer: B

Amazon Macie is a data security service that uses machine learning (ML) and pattern matching to discover and help protect your sensitive data.