

**Domain 1: Cloud Concepts**

1.1 Define the AWS Cloud and its value proposition

* Define the benefits of the AWS cloud including:
  + Security **(AWS Documentation:** [Advantages of Cloud Security](https://aws.amazon.com/blogs/publicsector/improving-security-with-cloud-computing-six-advantages-of-cloud-security/))
  + Reliability **(AWS Documentation:** [Reliability](https://docs.aws.amazon.com/wellarchitected/latest/framework/reliability.html))
  + High Availability
  + Elasticity **(AWS Documentation:** [Elasticity](https://wa.aws.amazon.com/wellarchitected/2020-07-02T19-33-23/wat.concept.elasticity.en.html))
  + Agility
  + Pay-as-you go pricing **(AWS Documentation:** [AWS Pricing](https://aws.amazon.com/pricing/?aws-products-pricing.sort-by=item.additionalFields.productNameLowercase&aws-products-pricing.sort-order=asc&awsf.Free%20Tier%20Type=*all&awsf.tech-category=*all))
  + Scalability
  + Global Reach
  + Economy of scale
* Explain how the AWS cloud allows users to focus on business value
  + Shifting technical resources to revenue-generating activities as opposed to managing infrastructure **(AWS Documentation:** [Business Value on AWS](https://aws.amazon.com/executive-insights/content/business-value-on-aws/))

1.2 Identify aspects of AWS Cloud economics

* Define items that would be part of a Total Cost of Ownership proposal
  + Understand the role of operational expenses (OpEx)
  + Understand the role of capital expenses (CapEx)
  + Understand labor costs associated with on-premises operations **(AWS Documentation:** [AWS Pricing/TCO Tools](https://docs.aws.amazon.com/whitepapers/latest/how-aws-pricing-works/aws-pricingtco-tools.html))
  + Understand the impact of software licensing costs when moving to the cloud **(AWS Documentation:** [Cost and licensing](https://docs.aws.amazon.com/prescriptive-guidance/latest/migration-sas-grid/licensing.html))
* Identify which operations will reduce costs by moving to the cloud
  + Right-sized infrastructure **(AWS Documentation:** [Right Sizing](https://aws.amazon.com/aws-cost-management/aws-cost-optimization/right-sizing/))
  + Benefits of automation **(AWS Documentation:** [Automation](https://docs.aws.amazon.com/whitepapers/latest/introduction-devops-aws/automation.html), [Investing in Cloud Automation](https://aws.amazon.com/blogs/apn/the-case-for-investing-in-cloud-automation/))
  + Reduce compliance scope (for example, reporting) **(AWS Documentation:** [Minimizing the PCI Compliance Burden Using Containerization, Microservices, and AWS](https://aws.amazon.com/blogs/apn/minimizing-the-pci-compliance-burden-using-containerization-microservices-and-aws/))
  + Managed services (for example, RDS, ECS, EKS, DynamoDB) **(AWS Documentation:** [AWS Managed Services](https://aws.amazon.com/managed-services/))

1.3 Explain the different cloud architecture design principles

* Explain the design principles
  + Design for failure **(AWS Documentation:** [Design for Failure](https://docs.aws.amazon.com/whitepapers/latest/running-containerized-microservices/design-for-failure.html))
  + Decouple components versus monolithic architecture **(AWS Documentation:** [Decomposing monoliths into microservices](https://docs.aws.amazon.com/prescriptive-guidance/latest/modernization-decomposing-monoliths/welcome.html))
  + Implement elasticity in the cloud versus on-premises **(AWS Documentation:** [Elasticity](https://wa.aws.amazon.com/wellarchitected/2020-07-02T19-33-23/wat.concept.elasticity.en.html))
  + Think parallel

**Domain 2: Security and Compliance**

2.1 Define the AWS shared responsibility model

* Recognize the elements of the Shared Responsibility Model **(AWS Documentation:** [Shared Responsibility Model](https://aws.amazon.com/compliance/shared-responsibility-model/))
* Describe the customer’s responsibility on AWS
  + Describe how the customer’s responsibilities may shift depending on the service used (for example with RDS, Lambda, or EC2) **(AWS Documentation:** [Shared Responsibility](https://docs.aws.amazon.com/whitepapers/latest/aws-security-incident-response-guide/shared-responsibility.html), [Shared Responsibility Model](https://docs.aws.amazon.com/whitepapers/latest/security-overview-aws-lambda/the-shared-responsibility-model.html))
* Describe AWS responsibilities [Shared Responsibility Model](https://aws.amazon.com/compliance/shared-responsibility-model/))

2.2 Define AWS Cloud security and compliance concepts

* Identify where to find AWS compliance information **(AWS Documentation:** [AWS Compliance Programs](https://aws.amazon.com/compliance/programs/), [Compliance Resources](https://aws.amazon.com/compliance/resources/))
  + Locations of lists of recognized available compliance controls (for example, HIPPA, SOCs) **(AWS Documentation:** [HIPAA](https://aws.amazon.com/compliance/hipaa-compliance/),[SOC](https://aws.amazon.com/compliance/soc-faqs/))
  + Recognize that compliance requirements vary among AWS services **(AWS Documentation:** [Security and compliance](https://docs.aws.amazon.com/whitepapers/latest/aws-overview/security-and-compliance.html))
* At a high level, describe how customers achieve compliance on AWS **(AWS Documentation:** [AWS Compliance](https://aws.amazon.com/compliance/?nc=sn&loc=3&refid=662aeb66-1ee5-4842-b706-60c6a1b4f187))
  + Identify different encryption options on AWS (for example, In transit, At rest) **(AWS Documentation:** [Encryption of Data in Transit](https://docs.aws.amazon.com/whitepapers/latest/efs-encrypted-file-systems/encryption-of-data-in-transit.html), [Encryption of Data at Rest](https://docs.aws.amazon.com/whitepapers/latest/efs-encrypted-file-systems/encryption-of-data-at-rest.html))
* Describe who enables encryption on AWS for a given service **(AWS Documentation:** [importance of encryption and how AWS can help](https://aws.amazon.com/blogs/security/importance-of-encryption-and-how-aws-can-help/))
* Recognize there are services that will aid in auditing and reporting **(AWS Documentation:** [AWS Audit Manager](https://aws.amazon.com/audit-manager/))
  + Recognize that logs exist for auditing and monitoring (do not have to understand the logs) **(AWS Documentation:** [Viewing HSM audit logs in CloudWatch Logs](https://docs.aws.amazon.com/cloudhsm/latest/userguide/understand-audit-logs.html))
  + Define Amazon CloudWatch, AWS Config, and AWS CloudTrail **(AWS Documentation:** [Amazon CloudWatch](https://docs.aws.amazon.com/AmazonCloudWatch/latest/monitoring/WhatIsCloudWatch.html), [AWS Config](https://docs.aws.amazon.com/config/latest/developerguide/WhatIsConfig.html), [AWS CloudTrail](https://docs.aws.amazon.com/awscloudtrail/latest/userguide/cloudtrail-user-guide.html))
* Explain the concept of least privileged access **(AWS Documentation:** [Security best practices in IAM](https://docs.aws.amazon.com/IAM/latest/UserGuide/best-practices.html))

2.3 Identify AWS access management capabilities

* Understand the purpose of User and Identity Management
  + Access keys and password policies (rotation, complexity) **(AWS Documentation:** [Managing access keys for IAM users](https://docs.aws.amazon.com/IAM/latest/UserGuide/id_credentials_access-keys.html), [Setting an account password policy for IAM users](https://docs.aws.amazon.com/IAM/latest/UserGuide/id_credentials_passwords_account-policy.html))
  + Multi-Factor Authentication (MFA) **(AWS Documentation:** [Using multi-factor authentication (MFA) in AWS](https://docs.aws.amazon.com/IAM/latest/UserGuide/id_credentials_mfa.html))
  + AWS Identity and Access Management (IAM) **(AWS Documentation:** [AWS Identity and Access Management (IAM)](https://aws.amazon.com/iam/?nc=sn&loc=1))
    - Groups/users **(AWS Documentation:** [IAM Identities (users, user groups, and roles)](https://docs.aws.amazon.com/IAM/latest/UserGuide/id.html))
    - Roles **(AWS Documentation:** [IAM roles](https://docs.aws.amazon.com/IAM/latest/UserGuide/id_roles.html))
    - Policies, managed policies compared to custom policies **(AWS Documentation:** [Policies and permissions in IAM](https://docs.aws.amazon.com/IAM/latest/UserGuide/access_policies.html), [AWS managed policies](https://docs.aws.amazon.com/IAM/latest/UserGuide/access_policies_managed-vs-inline.html))
  + Tasks that require use of root accounts **(AWS Documentation:** [AWS account root user credentials and IAM user credentials](https://docs.aws.amazon.com/general/latest/gr/root-vs-iam.html))
  + Protection of root accounts **(AWS Documentation:** [best practices for securing my AWS account](https://aws.amazon.com/premiumsupport/knowledge-center/security-best-practices/))

2.4 Identify resources for security support

* Recognize there are different network security capabilities
  + Native AWS services (for example, security groups, Network ACLs, AWS WAF) **(AWS Documentation:** [Control traffic to subnets using Network ACLs](https://docs.aws.amazon.com/vpc/latest/userguide/vpc-network-acls.html), [Control traffic to resources using security groups](https://docs.aws.amazon.com/vpc/latest/userguide/VPC_SecurityGroups.html), [AWS WAF](https://docs.aws.amazon.com/waf/latest/developerguide/waf-chapter.html))
  + 3rd party security products from the AWS Marketplace
* Recognize there is documentation and where to find it (for example, best practices, whitepapers, official documents)
  + AWS Knowledge Center, Security Center, security forum, and security blogs **(AWS Documentation:** [AWS Knowledge Center](https://aws.amazon.com/premiumsupport/knowledge-center/))
  + Partner Systems Integrators **(AWS Documentation:** [Next-Gen MSP Meets Global Systems Integrator on AWS](https://aws.amazon.com/blogs/apn/next-gen-msp-meets-global-systems-integrator-on-aws/))
* Know that security checks are a component of AWS Trusted Advisor **(AWS Documentation:** [AWS Trusted Advisor check reference](https://docs.aws.amazon.com/awssupport/latest/user/trusted-advisor-check-reference.html))

**Domain 3: Technology**

3.1 Define methods of deploying and operating in the AWS Cloud

* Identify at a high level different ways of provisioning and operating in the AWS cloud
  + Programmatic access, APIs, SDKs, AWS Management Console, CLI, Infrastructure as Code **(AWS Documentation:** [AWS APIs](https://docs.aws.amazon.com/general/latest/gr/aws-apis.html), [AWS SDK for JavaScript](https://aws.amazon.com/sdk-for-javascript/), [AWS Management Console](https://aws.amazon.com/console/), [AWS Command Line Interface](https://aws.amazon.com/cli/), [Infrastructure as Code](https://docs.aws.amazon.com/whitepapers/latest/introduction-devops-aws/infrastructure-as-code.html))
* Identify different types of cloud deployment models
  + All in with cloud/cloud native **(AWS Documentation:** [Cloud-Native](https://aws.amazon.com/blogs/apn/journey-to-being-cloud-native-how-and-where-should-you-start/))
  + Hybrid **(AWS Documentation:** [Hybrid Cloud with AWS](https://aws.amazon.com/hybrid/))
  + On-premises **(AWS Documentation:** [Deployments on an EC2/On-Premises Compute Platform](https://docs.aws.amazon.com/codedeploy/latest/userguide/deployment-steps-server.html))
* Identify connectivity options
  + VPN **(AWS Documentation:** [AWS VPN](https://aws.amazon.com/vpn/))
  + AWS Direct Connect **(AWS Documentation:** [AWS Direct Connect](https://docs.aws.amazon.com/directconnect/latest/UserGuide/Welcome.html))
  + Public internet **(AWS Documentation:** [Connect to the internet using an internet gateway](https://docs.aws.amazon.com/vpc/latest/userguide/VPC_Internet_Gateway.html))

3.2 Define the AWS global infrastructure

* Describe the relationships among Regions, Availability Zones, and Edge Locations **(AWS Documentation:** [Regions and Zones](https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/using-regions-availability-zones.html), [Regions and Availability Zones](https://aws.amazon.com/about-aws/global-infrastructure/regions_az/?p=ngi&loc=2&refid=662aeb66-1ee5-4842-b706-60c6a1b4f187))
* Describe how to achieve high availability through the use of multiple Availability Zones
  + Recall that high availability is achieved by using multiple Availability Zones **(AWS Documentation:** [Multi-AZ deployments for high availability](https://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/Concepts.MultiAZ.html), [Amazon RDS Multi-AZ](https://aws.amazon.com/rds/features/multi-az/))
  + Recognize that Availability Zones do not share single points of failure
* Describe when to consider the use of multiple AWS Regions **(AWS Documentation:** [Multi-Region Application Architecture](https://aws.amazon.com/solutions/implementations/multi-region-application-architecture/))
  + Disaster recovery/business continuity **(AWS Documentation:** [Disaster recovery options in the cloud](https://docs.aws.amazon.com/whitepapers/latest/disaster-recovery-workloads-on-aws/disaster-recovery-options-in-the-cloud.html), [Business Continuity Plan (BCP)](https://docs.aws.amazon.com/whitepapers/latest/disaster-recovery-workloads-on-aws/business-continuity-plan-bcp.html))
  + Low latency for end-users **(AWS Documentation:** [Low-latency computing with AWS Local Zones](https://aws.amazon.com/blogs/compute/low-latency-computing-with-aws-local-zones-part-1/))
  + Data sovereignty **(AWS Documentation:** [Embrace Data Sovereignty](https://aws.amazon.com/blogs/apn/embrace-data-sovereignty-and-low-latency-in-building-a-trusted-data-lake-with-aws-outposts-and-talend/))
* Describe at a high level the benefits of Edge Locations **(AWS Documentation:** [AWS for the Edge](https://aws.amazon.com/edge/))
  + Amazon CloudFront **(AWS Documentation:** [Amazon CloudFront](https://aws.amazon.com/cloudfront/?nc=sn&loc=1))
  + AWS Global Accelerator **(AWS Documentation:** [AWS Global Accelerator](https://aws.amazon.com/global-accelerator/?blogs-global-accelerator.sort-by=item.additionalFields.createdDate&blogs-global-accelerator.sort-order=desc&aws-global-accelerator-wn.sort-by=item.additionalFields.postDateTime&aws-global-accelerator-wn.sort-order=desc))

3.3 Identify the core AWS services

* Describe the categories of services on AWS (compute, storage, network, database) **(AWS Documentation:** [AWS Cloud Products](https://aws.amazon.com/products/?aws-products-all.sort-by=item.additionalFields.productNameLowercase&aws-products-all.sort-order=asc&awsf.re%3AInvent=*all&awsf.Free%20Tier%20Type=*all&awsf.tech-category=*all))
* Identify AWS compute services
  + Recognize there are different compute families **(AWS Documentation:** [Amazon EC2 Instance Types](https://aws.amazon.com/ec2/instance-types/))
  + Recognize the different services that provide compute (for example, AWS Lambda compared to Amazon Elastic Container Service (Amazon ECS), or Amazon EC2, etc.) **(AWS Documentation:** [Compute Services](https://docs.aws.amazon.com/whitepapers/latest/aws-overview/compute-services.html))
  + Recognize that elasticity is achieved through Auto Scaling
  + Identify the purpose of load balancers **(AWS Documentation:** [Application Load Balancer](https://docs.aws.amazon.com/elasticloadbalancing/latest/application/introduction.html))
* Identify different AWS storage services
  + Describe Amazon S3 **(AWS Documentation:** [Amazon S3](https://aws.amazon.com/s3/?nc=sn&loc=1))
  + Describe Amazon Elastic Block Store (Amazon EBS) **(AWS Documentation:** [Amazon Elastic Block Store (Amazon EBS)](https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/AmazonEBS.html))
  + Describe Amazon S3 Glacier **(AWS Documentation:** [Amazon S3 Glacier](https://docs.aws.amazon.com/amazonglacier/latest/dev/introduction.html))
  + Describe AWS Snowball **(AWS Documentation:** [AWS Snowball](https://aws.amazon.com/snowball/))
  + Describe Amazon Elastic File System (Amazon EFS) **(AWS Documentation:** [Use Amazon EFS with Amazon EC2](https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/AmazonEFS.html))
  + Describe AWS Storage Gateway **(AWS Documentation:** [Amazon S3 File Gateway](https://docs.aws.amazon.com/filegateway/latest/files3/what-is-file-s3.html))
* Identify AWS networking services
  + Identify VPC **(AWS Documentation:** [Finding information to connect to a VPC](https://docs.aws.amazon.com/quicksight/latest/user/vpc-finding-setup-information.html))
  + Identify security groups **(AWS Documentation:** [Finding information to connect to a VPC](https://docs.aws.amazon.com/quicksight/latest/user/vpc-finding-setup-information.html))
  + Identify the purpose of Amazon Route 53 **(AWS Documentation:** [Amazon Route 53](https://docs.aws.amazon.com/Route53/latest/DeveloperGuide/Welcome.html))
  + Identify VPN, AWS Direct Connect **(AWS Documentation:** [Identifying a Site-to-Site VPN connection](https://docs.aws.amazon.com/vpn/latest/s2svpn/identify-vpn.html), [AWS Direct Connect](https://aws.amazon.com/directconnect/?nc=sn&loc=1))
* Identify different AWS database services
  + Install databases on Amazon EC2 compared to AWS managed databases **(AWS Documentation:** [Choosing between Amazon RDS, Amazon EC2, or VMware Cloud](https://docs.aws.amazon.com/whitepapers/latest/oracle-database-aws-best-practices/choosing-between-amazon-rds-amazon-ec2-or-vmware-cloud-on-aws-for-your-oracle-database.html))
  + Identify Amazon RDS **(AWS Documentation:** [Amazon RDS DB instances](https://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/Overview.DBInstance.html))
  + Identify Amazon DynamoDB **(AWS Documentation:** [Amazon DynamoDB](https://docs.aws.amazon.com/amazondynamodb/latest/developerguide/Introduction.html))
  + Identify Amazon Redshift **(AWS Documentation:** [Getting started with Amazon Redshift](https://docs.aws.amazon.com/redshift/latest/gsg/getting-started.html))

3.4 Identify resources for technology support

* Recognize there is documentation (best practices, whitepapers, AWS Knowledge Center, forums, blogs) **(AWS Documentation:** [Follow Security Best Practices](https://aws.amazon.com/blogs/security/getting-started-follow-security-best-practices-as-you-configure-your-aws-resources/), [AWS Knowledge Center](https://aws.amazon.com/premiumsupport/knowledge-center/), [AWS Whitepapers & Guides](https://aws.amazon.com/whitepapers/?whitepapers-main.sort-by=item.additionalFields.sortDate&whitepapers-main.sort-order=desc&awsf.whitepapers-content-type=*all&awsf.whitepapers-tech-category=*all&awsf.whitepapers-industries=*all&awsf.whitepapers-business-category=*all&awsf.whitepapers-global-methodology=*all))
* Identify the various levels and scope of AWS support
  + AWS Abuse **(AWS Documentation:** [report abuse of AWS resources](https://aws.amazon.com/premiumsupport/knowledge-center/report-aws-abuse/))
  + AWS support cases **(AWS Documentation:** [Creating support cases and case management](https://docs.aws.amazon.com/awssupport/latest/user/case-management.html))
  + Premium support
  + Technical Account Managers **(AWS Documentation:** [AWS Enterprise Support](https://aws.amazon.com/premiumsupport/plans/enterprise/))
* Recognize there is a partner network (marketplace, third-party) including Independent Software Vendors and System Integrators **(AWS Documentation:** [AWS Partner Network](https://aws.amazon.com/partners/?nc=sn&loc=1&refid=662aeb66-1ee5-4842-b706-60c6a1b4f187), [AWS Partner Paths](https://aws.amazon.com/partners/paths/?nc=sn&loc=2&refid=662aeb66-1ee5-4842-b706-60c6a1b4f187))
* Identify sources of AWS technical assistance and knowledge including professional services, solution architects, training and certification, and the Amazon Partner Network **(AWS Documentation:** [technical support from AWS](https://aws.amazon.com/premiumsupport/knowledge-center/get-aws-technical-support/), [AWS Professional Services](https://aws.amazon.com/professional-services/), [Successful solutions architects do these five things](https://aws.amazon.com/blogs/training-and-certification/successful-solutions-architects-do-these-five-things/))
* Identify the benefits of using AWS Trusted Advisor **(AWS Documentation:** [AWS Trusted Advisor](https://aws.amazon.com/premiumsupport/technology/trusted-advisor/))

**Domain 4: Billing and Pricing**

4.1 Compare and contrast the various pricing models for AWS (for example, On-Demand Instances, Reserved Instances, and Spot Instance pricing) **(AWS Documentation:** [Amazon EC2 pricing](https://aws.amazon.com/ec2/pricing/))

* Identify scenarios/best fit for On-Demand Instance pricing **(AWS Documentation:** [Amazon EC2 On-Demand Pricing](https://aws.amazon.com/ec2/pricing/on-demand/), [On-Demand Instances](https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/ec2-on-demand-instances.html))
* Identify scenarios/best fit for Reserved-Instance pricing **(AWS Documentation:** [Reserved Instances](https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/ec2-reserved-instances.html), [Amazon EC2 Reserved Instances](https://aws.amazon.com/ec2/pricing/reserved-instances/))
  + Describe Reserved-Instances flexibility **(AWS Documentation:** [Instance Size Flexibility for EC2 Reserved Instances](https://aws.amazon.com/blogs/aws/new-instance-size-flexibility-for-ec2-reserved-instances/))
  + Describe Reserved-Instances behavior in AWS Organizations **(AWS Documentation:** [Reserved Instances](https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/ec2-reserved-instances.html))
* Identify scenarios/best fit for Spot Instance pricing **(AWS Documentation:** [Spot Instances](https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/using-spot-instances.html))

4.2 Recognize the various account structures in relation to AWS billing and pricing

* Recognize that consolidated billing is a feature of AWS Organizations **(AWS Documentation:** [Consolidated billing for AWS Organizations](https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/consolidated-billing.html))
* Identify how multiple accounts aid in allocating costs across departments **(AWS Documentation:** [AWS Cost Allocation For Customer Bills](https://aws.amazon.com/blogs/aws/aws-cost-allocation/), [Cost Allocation Basics](https://aws.amazon.com/blogs/aws-cloud-financial-management/cost-allocation-basics-that-you-need-to-know/))

4.3 Identify resources available for billing support

* Identify ways to get billing support and information **(AWS Documentation:** [AWS Billing and Cost Management](https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/billing-get-answers.html))
  + Cost Explorer, AWS Cost and Usage Report, Amazon QuickSight, third-party partners, and AWS Marketplace tools **(AWS Documentation:** [Analyzing your costs with AWS Cost Explorer](https://docs.aws.amazon.com/cost-management/latest/userguide/ce-what-is.html), [AWS Cost and Usage Reports](https://docs.aws.amazon.com/cur/latest/userguide/what-is-cur.html), [Amazon QuickSight](https://docs.aws.amazon.com/quicksight/latest/user/welcome.html), [AWS Managed Service Provider Partners](https://aws.amazon.com/partners/msp/?partner-solutions-cards.sort-by=item.additionalFields.partnerNameLower&partner-solutions-cards.sort-order=asc&awsf.partner-solutions-filter-partner-location-finserv=*all))
  + Open a billing support case **(AWS Documentation:** [Creating support cases and case management](https://docs.aws.amazon.com/awssupport/latest/user/case-management.html))
  + The role of the Concierge for AWS Enterprise Support Plan customers **(AWS Documentation:** [AWS Enterprise Support](https://aws.amazon.com/premiumsupport/plans/enterprise/))
* Identify where to find pricing information on AWS services
  + AWS Simple Monthly Calculator **(AWS Documentation:** [AWS Pricing Calculator console](https://docs.aws.amazon.com/pricing-calculator/latest/userguide/getting-started.html))
  + AWS Services product pages **(AWS Documentation:** [Using the Products page](https://docs.aws.amazon.com/servicecatalog/latest/userguide/enduser-productlist.html))
  + AWS Pricing API **(AWS Documentation:** [AWS Price List API](https://aws.amazon.com/blogs/aws/new-aws-price-list-api/))
* Recognize that alarms/alerts exist **(AWS Documentation:** [Creating a billing alarm to monitor your estimated AWS charges](https://docs.aws.amazon.com/AmazonCloudWatch/latest/monitoring/monitor_estimated_charges_with_cloudwatch.html))
* Identify how tags are used in cost allocation **(AWS Documentation:** [Using Cost Allocation Tags](https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/cost-alloc-tags.html))

**AWS Cloud Practitioner Cheat Sheet**

The AWS cheat sheet incorporates the list of basic terms in the AWS landscape. The basic terms include AWS services and information about AWS and cloud computing. Any AWS terminology cheat sheet would include details about AWS (Amazon Web Services) and cloud computing.

Learn with [AWS Cloud Practitioner White Papers](https://aws.amazon.com/whitepapers/?whitepapers-main.sort-by=item.additionalFields.sortDate&whitepapers-main.sort-order=desc)

**Cloud Computing and Services**

AWS cheat sheet lists out the information about cloud computing and the types of cloud. Cloud computing is basically an internet-based computing service, involving a wide network of various remote servers. It helps in centralized data storage and accessing computer services and resources. Cloud computing majorly falls under three different types, namely public, private, and hybrid cloud.

* First things first, the public cloud comprises a third-party service distributor giving resources and services to customers through the internet.
* After this, the private cloud involves the provision and management of resources and services specifically for a particular company.
* Subsequently, a hybrid cloud is an amalgamation of both public and private cloud traits.

**AWS Influence**

AWS influence plays an essential role in the formation of the AWS Cloud Practitioner cheat sheet. This helps in gaining a clearer and more accurate understanding of AWS’s current state and anticipated trends in the near future. Almost any association with a computer nowadays potentially have a use case for AWS services. This is clear evidence that AWS is a reliable alternative to traditional options like S3 Glacier.

Initially started as a cloud-based solution for storage and computing services, AWS is now applicable to almost every area such as databases, business productivity, virtual desktops, IoT development, machine learning, and analytics. Furthermore, AWS offers better adaptability for the growth of startups with limited resources for funding traditional datacenter deployments.

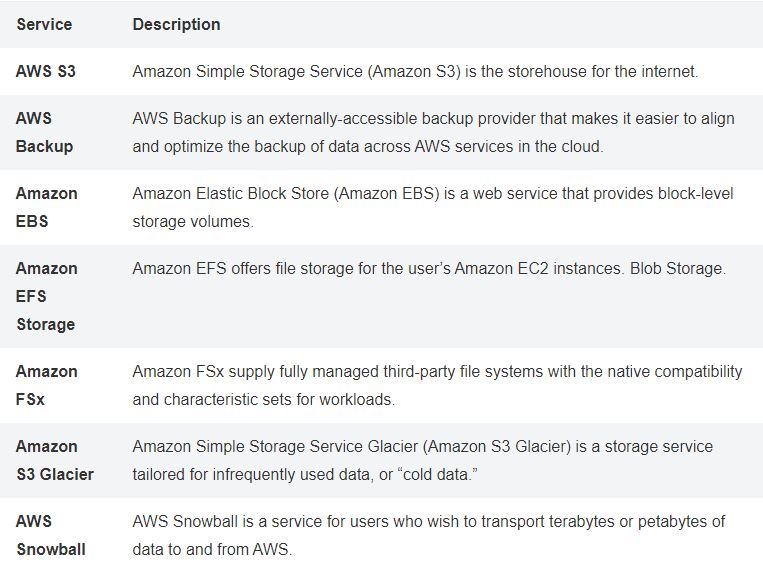
**AWS Region, AZs, Edge locations**

One of the essential phrases in the AWS glossary is the AWS regions. These entries in the AWS cheat sheet notify about all crucial aspects of the AWS landscape.

* First thing first, every region is a separate geographic area, completely independent, isolated from the other regions. Also, helps in achieving the greatest possible fault tolerance and stability.
* Secondly, the interaction between regions is across the public Internet.
* Subsequently, all-regions have multiple Availability Zones.
* After this, each and every AZ is actually isolated, geographically separated from each other and outlined as an independent failure zone
* Moreover, AZs are united with low-latency private links (not public internet)

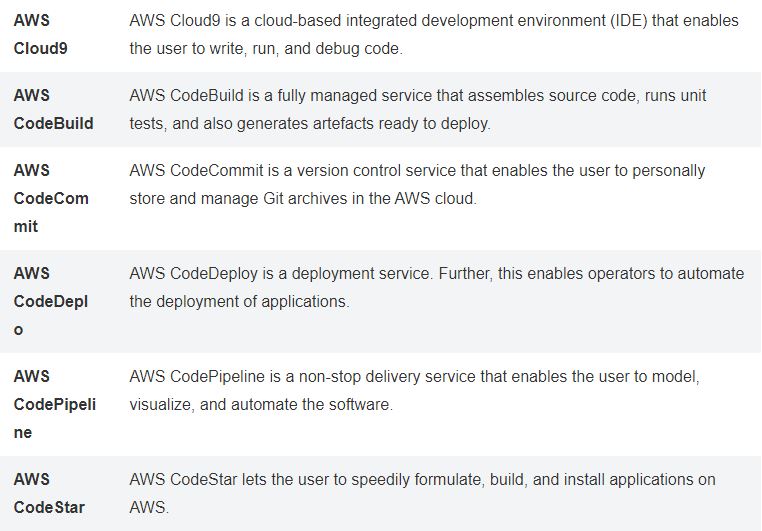
**AWS Services**

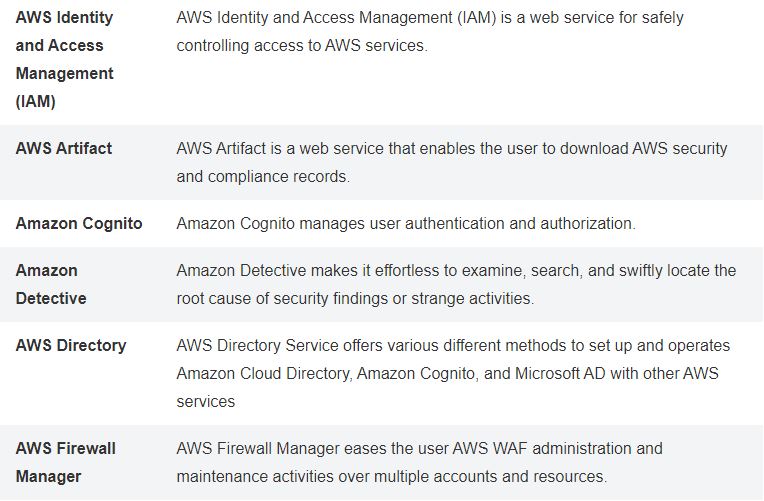
* Compute
* Storage
* Database
* Developer Tools
* Security, Identity, & Compliance
* Cryptography & PKI
* Machine Learning
* Management & Governance
* Migration & Transfer
* Mobile
* Networking & Content Delivery
* Media Services
* End-User Computing
* Analytics
* Application Integration
* Business Applications
* Satellite
* Robotics
* Blockchain
* Game Development
* Internet of Things (IoT)
* Customer Enablement Services
* Customer Engagement
* AR & VR
* SDKs & Toolkits
* General Reference
* AWS Management Console
* Additional Resources

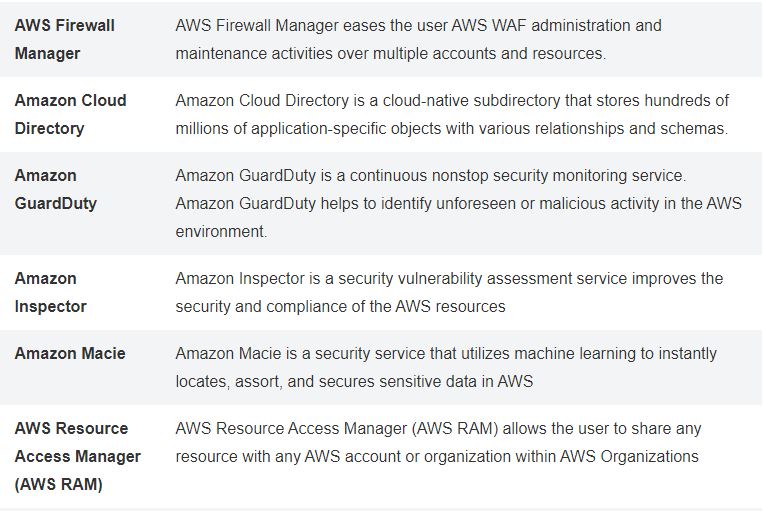


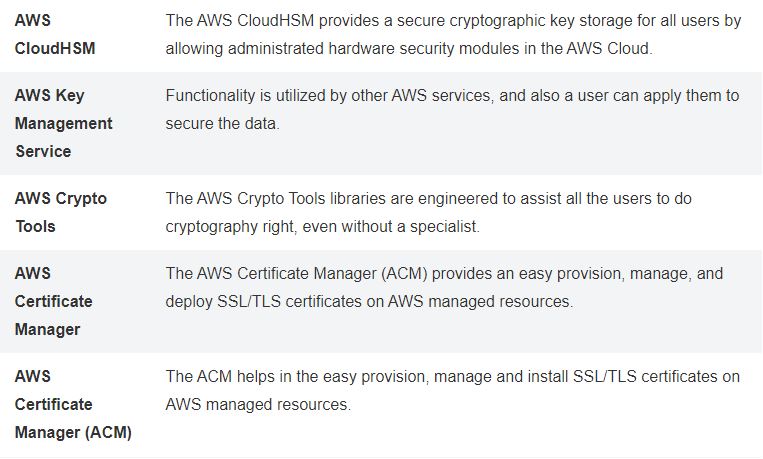
Graphical user interface, text, application, email

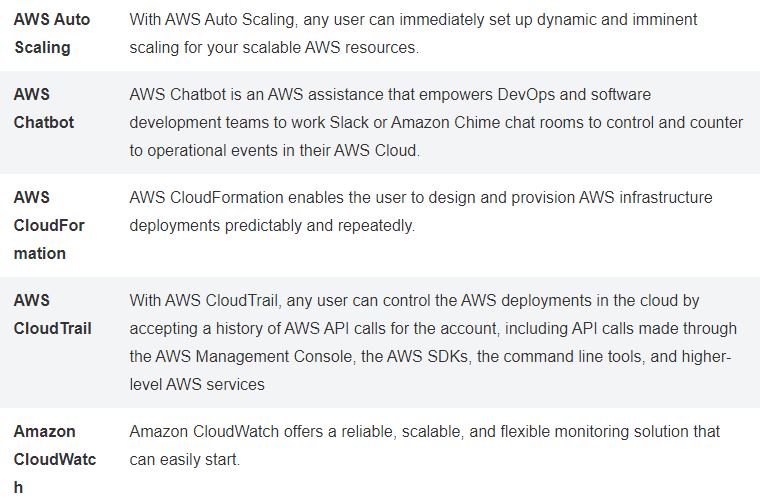
Description automatically generated

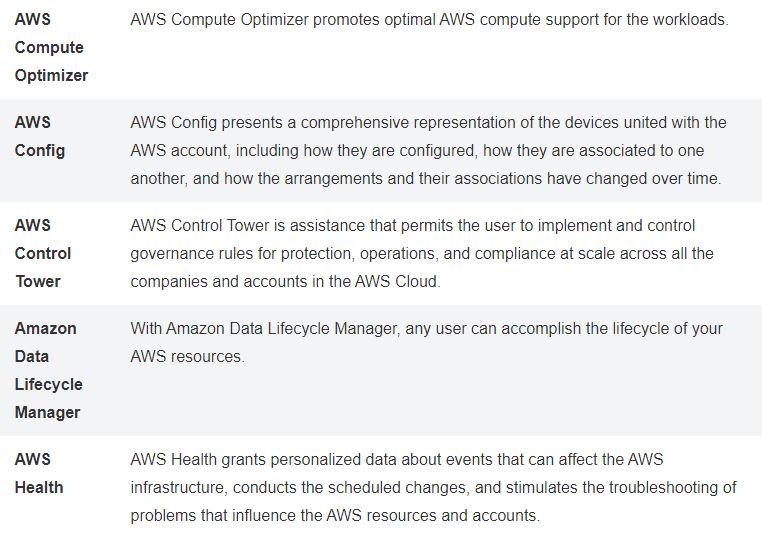


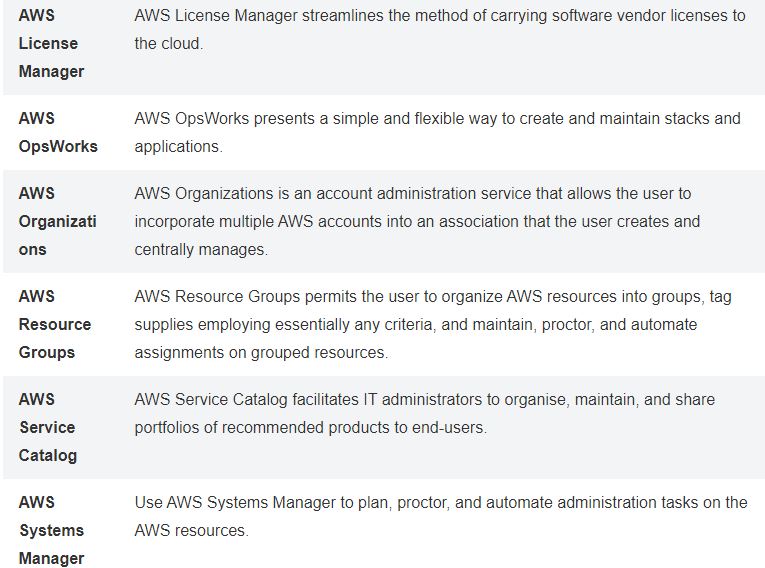












Graphical user interface, text, application

Description automatically generated with medium confidence

Graphical user interface, text, application, email

Description automatically generated

Graphical user interface, text, application, email

Description automatically generated

Application, table

Description automatically generated