| Terminology | **Definition** |
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| AMI (Amazon Machine Image) | A template containing a software configuration which provides the information necessary to launch an instance. End-users have the choice of choosing an AMI provided by AWS or those sold on the AWS Marketplace. |
| Auto-Scaling | A feature that automatically scales users’ Amazon EC2 capacity depending on their usage. Auto-Scaling allows users to reduce costs as it seamlessly adjusts for demand spikes and demand lulls. |
| Availability Zone | An isolated location designated by Amazon to host clients’ EC2 usage. Amazon EC2 is hosted in multiple regions across the world and Availability Zones are a geographic subset under each region. Amazon encourages clients to host their instances in two or more Availability Zones to reduce the risk of losing instances. |
| Capacity Planning | The process of determining which one of the 12 million potential configuration options on AWS a user should choose to optimize operations. Because each user has different needs, it is important to take into account how much of each offering, CPU or memory, for instance, one needs in the planning process. |
| CloudFormation | Allows developers and systems administrators to easily create and manage a group of related AWS resources by provisioning and updating them in an organized way. It is a feature offered by Amazon with no additional charge. |
| CloudWatch | A tracking service which allows developers and administrators to monitor resource utilization, application performance, and operational health. Users can set various metrics within CloudWatch to make sure that they are tracking exactly what they want to keep an eye on. |
| Content Distribution Network (CDN) | A large distributed system of servers deployed in data centers all across the internet. CDNs serve content to an increasing number of end-users and account for a large part of the content available online. Recently, large companies such as Microsoft and Amazon began to operate their own CDNs to complement their cloud product offerings. |
| Data Pipeline | A web service offered by Amazon which enables you to process and move data between different AWS services such as computing, storage and on-premise data sources at a specified timeline. |
| Disaster Recovery (DR) | An architecture is a prevention mechanism that scales up immediately and enable a rapid failover in case of a failure in users’ critical IT systems. It allows users to recover faster and insure against the expense of a second physical site which would be necessary without DR. |
| Dynamo DB | A NoSQL database service offered by Amazon that allows guaranteed throughput and low latency, making it suitable for users interested in gaming, ad tech, mobile and other applications. |
| Elastic Block Store (Amazon EBS) | Offers block level storage volumes for EC2 users. With Amazon EBS, users can decrease the risk of running into component failures as its feature automatically replicates data within each Availability Zone. |
| Elastic Compute Cloud (EC2) | A web service that is central to Amazon’s cloud computing platform. It allows users to ‘rent’ from its resizable computing capacity and possibly save cost by paying per usage. |
| Elastic MapReduce (EMR) | Allows any AWS user to process large amounts of data using a hosted Hadoop framework. This feature runs on the EC2 and S3 infrastructure. |
| ElastiCache | Provides in-memory caching for web applications. Users can use this feature to retrieve information from in-memory caches faster than getting information from disk-based databases. Namely, ElasticCache supports two open-source caching engines called Memcached and Redis. |
| Identity and Access Management (IAM) | A service that is used to authenticate access to the various services of AWS. IAM allows users to securely control access to their infrastructure and resources on AWS. |
| Import/Export | A storage and content delivery service that accelerates the rate it takes to move large amounts of data into and out of AWS using storage devices that are portable and easy to transport. |
| Instance | A fundamental building block of AWS cloud which acts as a virtual server that runs applications. Instances are created from an Amazon Machine Image. |
| Management Console | Allows clients to access and manage AWS through a user-friendly interface. With this console, users can see all AWS services in one place, manage their AWS account, access AWS resources from any device and oversee their infrastructure in all regions. |
| Migration | The act of transferring a user’s infrastructure to AWS so that they can take advantage of many features offered such as scalable capacity, computing and storage. |
| Redshift | A database service that provides petabyte-scale data warehousing with column-based storage and multi-node compute. Users can use this service to more efficiently analyze their data using existing business intelligence tools. |
| Relational Database Service (RDS) | A web service that allows users to set up, operate and scale a relational database in the cloud. Using this feature, users can resize their capacity and manage database administration tasks which can save them time and cost. |
| Reserved Instance | A purchase option which allows users to minimize cost by purchasing instances in bulk ahead of time. Users can buy these instances on a monthly basis ranging from 1 month to 36 months. Users can also choose the amount of money they put upfront. |
| Route 53 | A scalable Domain Name System (DNS) that help businesses and developers to effectively route their end users in Internet applications by translating website addresses to the IP addresses. |
| Scalability | One of many benefits AWS offers to its users. If a user’s cloud computing usage is projected to grow, migrating to AWS might be a valid consideration as it allows users to scale without incurring an upfront cost of purchasing servers and other related expenses. |
| Simple Storage Service (S3) | A storage web service that provide storage through web services interfaces such as REST, SOAP and BitTorrent. Amazon intends to allow users to reduce storage cost by maximizing the benefits of economies of scale. |
| Virtual Private Cloud (VPC) | A feature offered by AWS that allows users to provision an isolated section of the Cloud where they can launch AWS resources in a virtual network. This feature allows users to have complete control over their virtual networking environment. |
| Workload | The amount of processing that a computer is given to perform in under certain time frame. We can also think of it as an abstraction of the actual work that a user’s instance is required to perform. |
| Virtual Machine Import/Export | A feature offered by AWS that users can use to import virtual machine images from their existing environment to Amazon EC2 instances and export them back to their on-premise environment. |
| ELB (Elastic Load Balancing) | Elastic Load Balancing automatically distributes incoming application traffic across multiple Amazon EC2 instances in the cloud. It enables you to achieve greater levels of fault tolerance in your applications, seamlessly providing the required amount of load balancing capacity needed to distribute application traffic. |
| Lambda | AWS Lambda is a compute service where you can upload your code to AWS Lambda and the service can run the code on your behalf using AWS infrastructure. After you upload your code and create what we call a Lambda function, AWS Lambda takes care of provisioning and managing the servers that you use to run the code. |
| Kinesis | Amazon Kinesis Streams enables you to build custom applications that process or analyze streaming data for specialized needs. You can continuously add various types of data such as clickstreams, application logs, and social media to an Amazon Kinesis stream from hundreds of thousands of sources. Within seconds, the data will be available for your Amazon Kinesis Applications to read and process from the stream. |
| ECS (EC2 Container Service) | Amazon EC2 Container Service (ECS) is a highly scalable, high performance container management service that supports Docker containers and allows you to easily run applications on a managed cluster of Amazon EC2 instances. Amazon ECS eliminates the need for you to install, operate, and scale your own cluster management infrastructure. |
| EFS (Elastic File System) | Amazon Elastic File System (Amazon EFS) is a file storage service for Amazon Elastic Compute Cloud (Amazon EC2) instances. Amazon EFS is easy to use and provides a simple interface that allows you to create and configure file systems quickly and easily. With Amazon EFS, storage capacity is elastic, growing and shrinking automatically as you add and remove files, so your applications have the storage they need, when they need it. |