

# Amazon Web Services

Amazon Web Services(AWS) is a Amazon.com subsidiary which offers cloud-computing services at very affordable rates, therefore making its customer base strong from small scale companies like Pinterest to big enterprises like D-Link.

It provides a mix of infrastructure as a service (IaaS), platform as a service (PaaS) and packaged software as a service (SaaS) offerings.

AWS launched in 2006 from the internal infrastructure that Amazon.com built to handle its online retail operations.

AWS was one of the first companies to introduce a pay-as-you-go cloud computing model that scales to provide users with compute, storage or throughput as needed.

## Domains in which AWS offer services:

### 1. Compute

It is used to process data on the cloud by making use of powerful processors which serve multiple instances at a time.

### 2. Storage and Content Delivery

The storage as the name suggests, is used to store data in the cloud, this data can be stored anywhere but content delivery on the other hand is used to cache data nearer to the user so as to provide low latency.

### 3. Database

The database domain is used to provide reliable relational and non relational database instances managed by AWS.

### 4. Networking

It includes services which provide a variety of networking features such as security, faster access etc.

### 5. Management Tools

It includes services which can be used to manage and monitor your AWS instances.

### 6. Security and Identity

It includes services for user authentication or limiting access to a certain set of audience on your AWS resources.

### 7. Application Services

It includes simple services like notifications, emailing and queuing.

## Compute

### - AWS EC2

It is a web service which provides re-sizable compute capacity in the cloud. It is designed to make the web scale computing easier for developers.

### - AWS Elastic Beanstalk

Elastic Beanstalk lets you quickly deploy and manage applications in AWS without worrying about the underlying infrastructure.

### - AWS Elastic Load Balancing

ELB automatically manages the workload on your instances and distributes them to other instances in case of an instance failure.

### - AWS Lambda

AWS Lambda is used to execute backend code without worrying about the underlying architecture, you just upload the code and it runs.

### - AWS Autoscaling

The Autoscaling feature is used to scale up and down automatically as and when required.

## Storage and Content Delivery

### - S3 AWS

S3 stands for simple storage service, it is used for storing data in the form of objects in the AWS Cloud.

### - Amazon CloudFront

CloudFront is a content delivery network which is used to cache data to an edge location which reduces latency.

### - Amazon EBS

Amazon Elastic Block Storage is a storage service wherein each block of storage acts like a separate hard drive.

### - Amazon Glacier

Glacier is an archiving service offered by Amazon, which offers low cost data archiving.

### - AWS Import/Export Snowball

It offers physical transfer of data between user's location and AWS data centers, the device which is used to transfer the data is called Snowball.

### - AWS Storage Gateway

It is used to provide seamless integration with data security features between your on premise software appliance and AWS Cloud.

## Database

### - Amazon Aurora

It is a relational database engine that combines the speed and reliability of high-end commercial databases and the cost effectiveness and simplicity of open-source databases.

### - Amazon RDS

Amazon RDS is a managed relational database service which does routine database tasks in 6 familiar databases like Amazon Aurora, MySQL, MariaDB, Oracle, Microsoft SQL Server, and PostgreSQL.

**- Amazon DynamoDB**

It is a fully managed No-SQL database service. It is known for extremely low latencies and scalability.

**- Amazon ElastiCache**

It is a web service that makes it easy to set up, manage and scale a distributed cache-in environment in the cloud.

**- Amazon Redshift**

Amazon Redshift is a fully managed petabyte-scale data warehouse service in the cloud.

## Networking

**- VPC AWS**

Amazon VPC lets you launch AWS resources in a virtual network that you define. It closely resembles a traditional network that you'd operate in your data center.

**- AWS Direct Connect**

It helps you establish a private connection between your premises and AWS, therefore giving better network performance and throughput than an Internet based connection.

**- Amazon Route 53**

Route 53 is a highly scalable and highly available Domain Name System by Amazon AWS. The name is in reference to the TCP and UDP's port 53 where DNS requests are addressed.

## Management Tools

**- Amazon CloudWatch**

It is a monitoring tool by AWS which is used to keep a track on the AWS resources and the applications you run on Amazon AWS.

**- AWS CloudFormation**

It is a service which helps you setup and model your Amazon AWS resources so that you can spend less time managing these resources and more time focusing on the development.

**- AWS CloudTrail**

AWS CloudTrail is a logging service which records the API calls to your Amazon AWS account and delivers them to you.

**- AWS Command Line Tool**

It is an all in one tool to manage all your AWS services, by downloading and configuring only one tool you can manage all the AWS services through the command line.

**- AWS OpsWorks**

It is a configuration management tool that helps configure and operate applications of all size and shapes using Chef.

**- Trusted Advisor**

Trusted Advisor is a customized cloud monitoring tool, that analyzes your AWS environment and gives insights on the expense, performance improvement, security gaps and reliability.

## Security and Identity

### - AWS Identity and Access Management(IAM)

It is an AWS service that helps you control access to your AWS resources for your users.

### - AWS Key Management Service

It is a managed service that helps you create and control encryption keys which is used to encrypt your data, and uses Hardware Security Modules to protect the security of your keys.

## Application Services

### - Amazon SES

It is a cost effective emailing service which is built on the scalable and reliable infrastructure of Amazon.com

### - Amazon SNS

It is a web service offered by AWS that manages the delivery of messages to subscribed endpoints or clients.

### - Amazon SQS

It is a fast, reliable and scalable message queuing service, it can be used to transmit any volume of data at any level of throughput, without losing any messages or without the use of any other service.



[www.facebook.com/marvellousinfosystems/](https://www.facebook.com/marvellousinfosystems/)