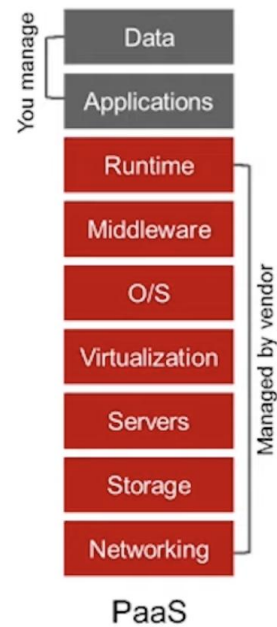


AWS Compute Services

Amazon Elastic Beanstalk

This compute service is a PaaS offering by AWS. Unlike Amazon EC2 you do not set up underlying infrastructure and instead you can quickly deploy applications to AWS Cloud Platform and manage them.



AWS Compute Services

Amazon Lambda

AWS Lambda is a 'serverless' compute service by Amazon Web Services

Developers do not need to worry about which resources to launch, or how to manage them

All they must do is just put the code on Amazon Lambda and it should work.



AWS Compute Services

Amazon Elastic Load Balancers: Scenario

Sudden Spike In Application Traffic

Application Crash due to Unknown reasons

EC2 instance Crash

AWS Compute Services

Amazon Elastic Load Balancers

Elastic Load Balancer is a load balancing service by AWS, which **distributes** incoming traffic across several targets, such as Amazon EC2 instances, Lambda functions, containers, and range of IP addresses, in multiple Availability Zones

Automatically scales to meet the incoming traffic

Improves overall performance of applications

Increases availability and fault tolerance of applications

Regular health checks, to send only to healthy targets

AWS Compute Services

Amazon Elastic Load Balancers: Types



Classic Load Balancer

Network Load Balancer

Application Load Balancer

AWS Compute Services

Amazon Autoscaling

Amazon EC2 Auto Scaling ensures that you have enough EC2 instances available to handle the load for your application by launching or terminating Amazon EC2 instances automatically

Better Fault Tolerance

Better Cost Management

High Availability

AWS Compute Services

Amazon EC2

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

Scalable

Flexible

Cost Efficient



AWS Compute Services

Amazon EC2: Instance

An instance is a virtual server for running applications on Amazon's EC2.

Set of tiny computers on a single machine

With Separate Hardware and Networking

All Existing Virtually



AWS Compute Services

Amazon EC2: Instance Types

General Purpose Instances

Compute Instances

Memory Instances

GPU Instances

Storage Instances



AWS Compute Services

Amazon EC2: Pricing Model

On Demand

Dedicated

On Spot

Reserved

AWS Compute Services

Amazon EC2

Application Based
Classification

Burstible

EBS Optimised

Dedicated

Cluster Network