ONE PAGE SUMMARY

IT & Software › AWS › EC2

Introduction to EC2

Unlock the Power of Cloud Computing with EC2!

DEFINITION

> Amazon EC2 (Elastic Compute Cloud) is a web service that provides scalable computing capacity in the cloud. It allows users to run virtual servers on-demand, making it easier to manage applications and workloads.

KEY CONCEPTS

Instances

Instances are virtual servers that run applications on EC2. They can be launched in various sizes and configurations.

AMI

An Amazon Machine Image (AMI) is a template that contains the software configuration for an instance, including the operating system and applications.

Elasticity

EC2 allows you to scale resources up or down based on demand, ensuring you only pay for what you use.

Security Groups

Security groups act as virtual firewalls for your instances, controlling inbound and outbound traffic.

Pricing Models

EC2 offers various pricing models, including On-Demand, Reserved, and Spot Instances, to suit different usage needs.

EXAMPLES

→ Launching a web server using a pre-configured AMI.

→ Scaling up instances during traffic spikes for an e-commerce site.

→ Using Spot Instances to reduce costs for batch processing tasks.

MEMORY TIPS

★ Remember AMI as 'Always My Image' for easy recall of its purpose.

★ Think of EC2's elasticity like a rubber band that stretches and shrinks with demand.

★ Use the acronym 'SIPS' for Security groups, Instances, Pricing, and Scaling.

COMMON MISTAKES

✗ Not configuring security groups properly, leading to accessibility issues.

✗ Forgetting to terminate unused instances, resulting in unexpected charges.

✗ Choosing the wrong instance type for specific workloads.

QUICK RECAP

Amazon EC2 provides scalable virtual servers in the cloud, allowing flexible resource management. Key concepts include instances, AMIs, and security groups, which help optimize performance and security. Remember to monitor your instances to avoid unnecessary costs.