Amazon Elastic Compute Cloud

Secure and resizable compute capacity to support virtually any workload

Amazon Elastic Compute Cloud (Amazon EC2) provides virtual servers, known as instances, for any workload. With Amazon EC2, you can launch and manage applications on servers, control network access, set up security configurations, and scale resources based on user demand.

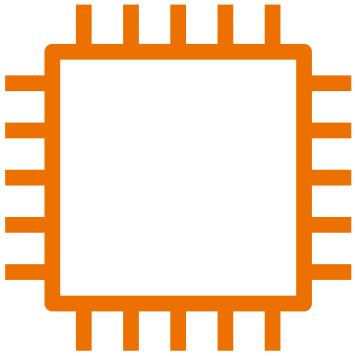
Amazon EC2 has a wide selection of instances that offer different CPU, memory, storage, and networking capacity, depending on the use case.

Concepts

- **Instance:** A virtual server where you deploy applications.
- **Amazon Machine Image (AMI):** A required image to launch an instance. AMI typically contains information about an instance, operating system, additional pre-installed software, and image metadata.
- **Fleet:** A group of instances that you can manage together to optimize costs and meet the demand.
- **Tag:** A way to label and categorize instances for cost and management purposes.

Purchase Options

Amazon EC2 provides the following purchasing options to enable you to optimize your costs based on your needs:



Instance

- **On-Demand Instances:** Pay for the time and compute capacity that you use.
- **Reserved Instances:** 1 or 3-year commitment plan to a consistent amount of usage.
- **Spot Instances:** Unused instances that can tolerate interruptions and have flexible start and end times.
- **Dedicated Hosts:** Physical server machines dedicated to a specific user.
- **Dedicated Instances:** Single-tenant instances that you pay for on the hourly basis.
- **Savings Plans:** 1 or 3-year commitment plan to a consistent amount of usage with savings up to 72% over On-Demand pricing.
- **Capacity Reservations:** Reserve capacity for your EC2 instances in a specific Availability Zone.

Use Cases

Application Hosting
Launch and manage applications and workloads on virtual servers, and scale them as neeeded.

Software Testing
Provision environments for testing and discard instances when test is completed.

Machine Learning
Use purpose-built instances for training and deploying machine learning models.

Optimization
Optimize performance and cost by using Spot Instances and Savings Plans.

Hybrid Cloud
Build hybrid cloud environments for operational consistency.