

Compute Services

Regions and Availability Zones

AWS EC2 is available worldwide, in geographical areas called "regions". Each region contains between 2 and 6 data centers sited miles away from each other and connected to their own power and networking.

Each of those data centers is called an "availability zone". Within a region, the availability zones are interconnected with fiber-optic cables or other ultra-fast connections.

Instance types

EC2 has a wide selection of instance types optimized to fit different use cases. An instance type is comprised of CPU, memory, storage, and networking. The range of instance types EC2 offers gives you the flexibility to choose the right mix for your application.

Auto Provisioning

In the cloud, servers can scale up automatically. Launching and configuring an instance automatically, without human intervention, is crucial for smooth and reliable operation. Launching and configuring each instance manually is a recipe for human error.

EC2 allows you to run a custom script the first time an instance boots, for just this reason.

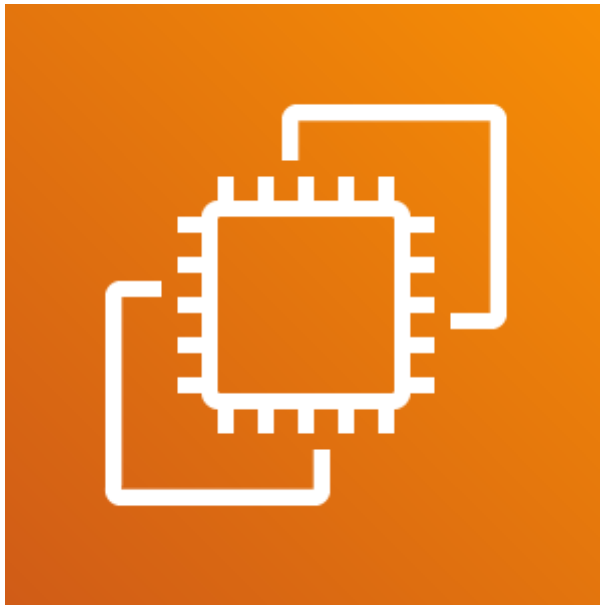
Security Groups

Security is very important in the cloud. Access to servers is enforced with firewall rules knowns as "security groups".

Elastic IP Address

Instances' public IP addresses are dynamic and will change when you restart your instance, An Elastic IP Address is static and can always remain attached to the instance you want. An Elastic IP is public and reachable from the Internet.

Throughout this lesson you will practice working with all of these core features of AWS EC2.



AWS EC2 Logo