



# INTRODUCTION TO aws

The AWS logo, featuring the word "aws" in a dark blue, lowercase, sans-serif font, with a thick orange curved arrow underneath it pointing from left to right.

SUJIT LAWARE  
IIT MADRAS

# WHAT IS AWS ?

AWS is a cloud computing service offered by Amazon. AWS lets you build, test, deploy and manage applications and services. All this is done via the data-centers and the hardware managed by Amazon. AWS provides you with a combination of Infrastructure-as-a-Service (IaaS), Platform-as-a-Service (PaaS), and Software-as-a-Service (SaaS) offerings.

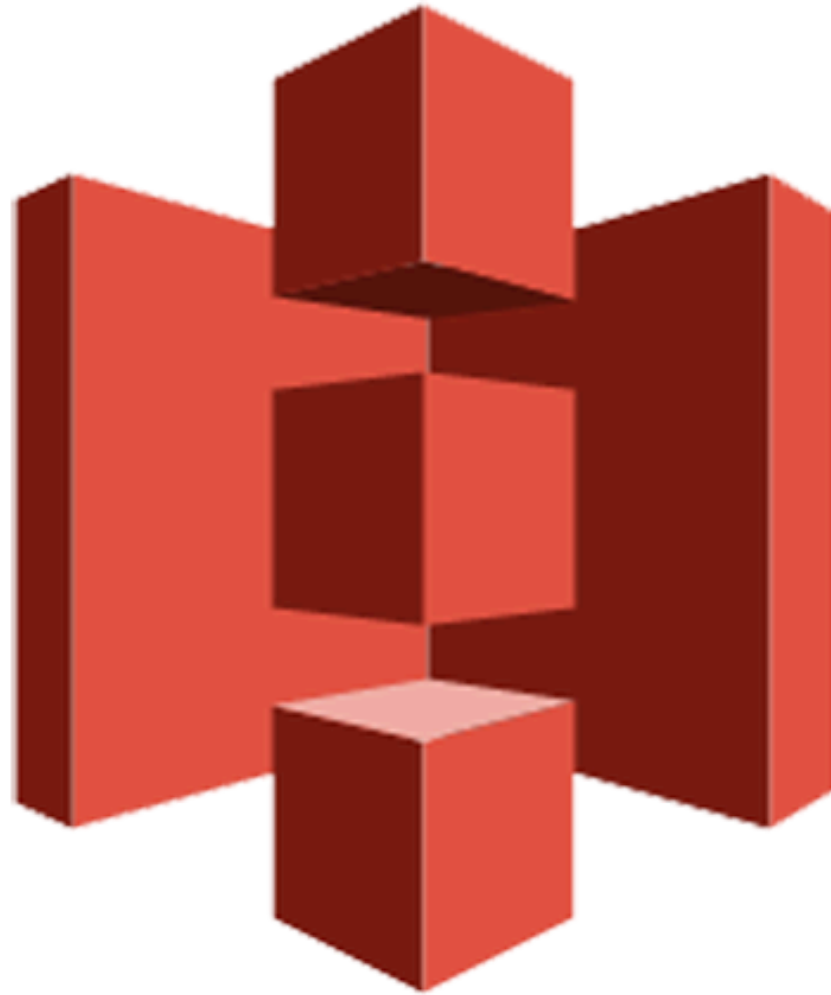
- Companies like Netflix, Reddit, Expedia and NASA use AWS for critical infrastructure hosting.
- AWS offers 200+ cloud services, supporting advanced technologies across various domains.
- AWS ensures on-demand resource scaling with high availability and reliability globally.



# AWS Foundation Services



Amazon  
**EC2**



Amazon S3

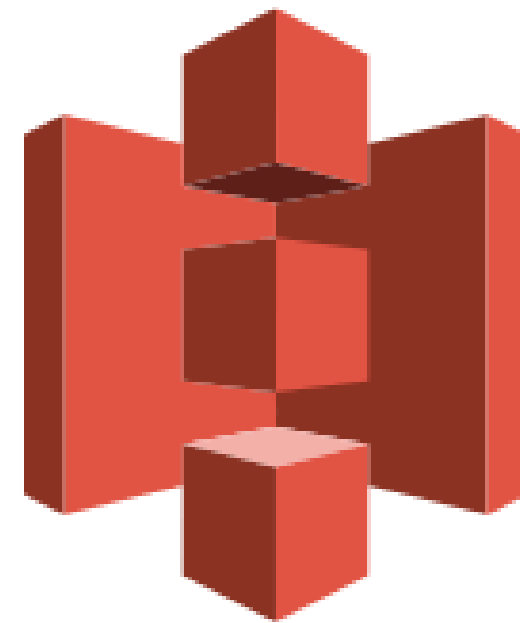


AWS Identity and Access  
Management (IAM)

# Amazon S3: Storage Simplified

S3 is an object storage service for scalability. It offers high availability and durability. S3 provides flexible security and access controls. This ensures your data is safe and accessible.

- Scalable for any data volume
- 99.99% availability
- Suitable for static websites



**amazon**  
**S3**

# Amazon S3

## Key Features :



### Storage Classes

Multiple storage classes optimize cost. Options include Standard and Intelligent-Tiering.



### Data Encryption

Data encryption protects data. It encrypts data at rest and during transfer.



### Use Case:

- **Store images, PDFs**
- **backups**
- **videos**
- **ML datasets**

# IAM: Identity and Access Management

IAM is a service by AWS that helps you securely control access to AWS services and resources.

**In simple terms:**

It lets you decide who can do what in your AWS account.

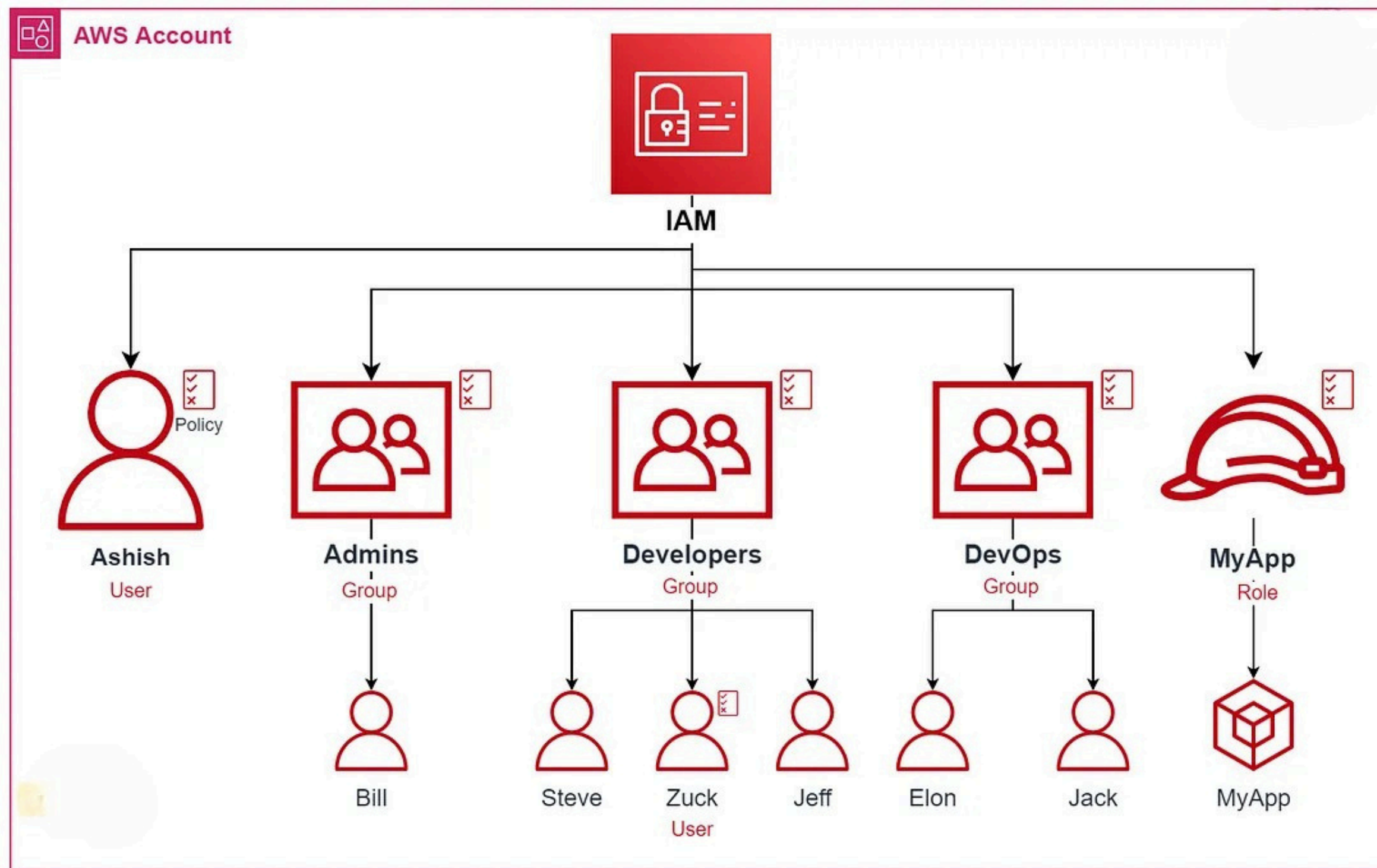
## Why IAM?

- AWS has lots of powerful services. You don't want everyone to access everything.
- IAM helps enforce least privilege – people and applications get only the permissions they actually need.
- IAM is free and critical for security and governance.



AWS Identity and Access  
Management (IAM)

# IAM: Identity and Access Management



**Use Case: Give your team access to EC2, S3, etc. with the right permissions only.**



# Amazon EC2: Compute Power

Amazon EC2 is a web service that lets you run virtual servers (called instances) in the cloud.

**In simple terms:**

EC2 is like renting a computer on the internet — you can install anything, run anything, and scale anytime.

## 🧠 Why EC2?

- You don't have to buy physical hardware.
- You can launch, stop, and scale servers within minutes.
- You pay only for what you use.

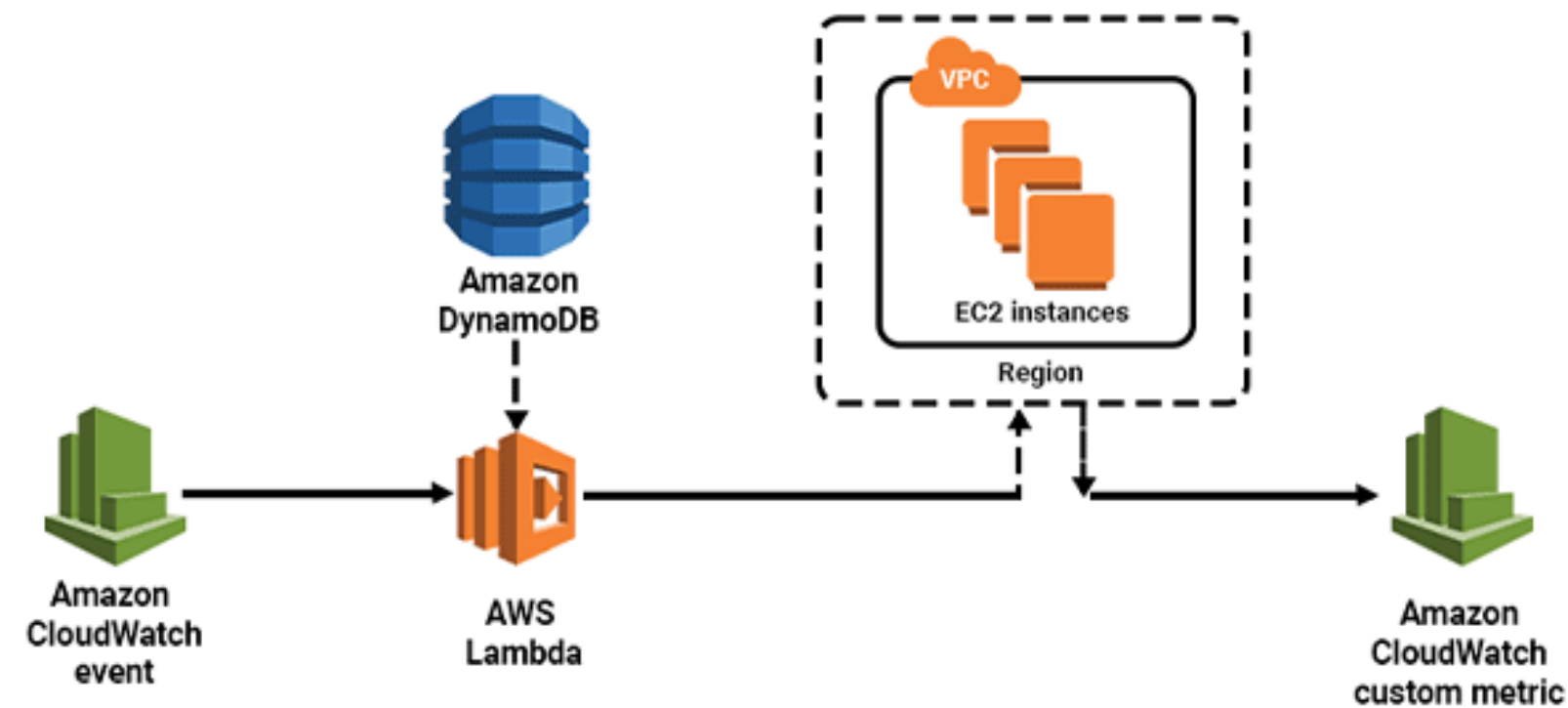


Amazon  
**EC2**



# Amazon EC2: Compute Power

## Amazon EC2(Elastic Compute Cloud)



## Use Case:

- **Host websites**
- **Deploy ML models**
- **Run batch jobs**



**AWS CLOUD CLUB**  
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aws  
DEMO