

Trainee Slides - AWS Cloud Basics Day 1

Slide 1: Welcome & Agenda

Welcome to Day 1 - AWS Cloud Basics

Agenda:

- What is Cloud Computing?
- Why AWS?
- AWS Global Infrastructure
- IAM Overview
- EC2 Introduction
- Live Demo: Launching an EC2 Instance
- Hands-On Lab
- Challenge Assignment

Slide 2: What is Cloud Computing?

Cloud computing provides on-demand access to computing resources over the internet.

Models:

- IaaS: Infrastructure as a Service (e.g., EC2)
- PaaS: Platform as a Service (e.g., Elastic Beanstalk)
- SaaS: Software as a Service (e.g., Gmail)

Slide 3: Why AWS?

AWS is the leading cloud provider with 200+ services.

Benefits:

- Scalable

- Cost-effective
- Secure
- Global availability

Use Cases: Hosting, Data Analysis, Machine Learning

Slide 4: AWS Global Infrastructure

AWS has Regions (geographical areas) and Availability Zones (data centers).

Example:

- Region: us-east-1
- AZs: us-east-1a, 1b, 1c

Benefit: High availability and fault tolerance

Slide 5: IAM Overview

IAM (Identity and Access Management) helps control who can access AWS resources.

Key Concepts:

- User: Individual identity
- Group: Collection of users
- Role: Temporary permissions
- Policy: JSON-based permissions

Slide 6: EC2 Basics

EC2 is a virtual server in AWS.

To launch:

- Select AMI
- Choose instance type (e.g., t2.micro)
- Create key pair for SSH
- Configure security group (firewall rules)

Slide 7: Live Demo Plan

Steps to follow:

1. Create IAM user with EC2 access
2. Login using IAM user
3. Launch EC2 instance
4. SSH into EC2
5. Install Apache
6. Host a basic HTML page

Slide 8: Hands-On Lab

Tasks:

- Create IAM user
- Launch EC2 instance
- Setup Apache server
- Deploy index.html page
- Document your work (commands, screenshots)

Slide 9: Challenge Assignment

Project:

- Create IAM user 'web-deployer'
- Launch EC2 and host a company About page
- Upload logo to S3 and make public
- Embed S3 image in your web page

- Document and diagram your architecture

Slide 10: Submission Checklist

Deliverables:

- EC2 web page running
- Public S3 image used in the page
- Diagram of your setup
- README with steps and screenshots

Slide 11: Resources

- [IAM Docs](https://docs.aws.amazon.com/IAM/latest/UserGuide/)
- [EC2 Docs](https://docs.aws.amazon.com/EC2/latest/UserGuide/)
- [S3 Hosting Guide](https://docs.aws.amazon.com/AmazonS3/latest/userguide/WebsiteHosting.html)

YouTube:

- EC2 Setup
- IAM Tutorial
- S3 Hosting Walkthrough

Slide 12: Q&A

Let's discuss any questions before you begin the challenge.