BATCH : BATCH 85

LESSON : AWS

DATE : 02.08.2022

SUBJECT : INTRODUCTION TO AWS

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techproeducation.com   info@techproeducation.com   +1 (917) 768-7466

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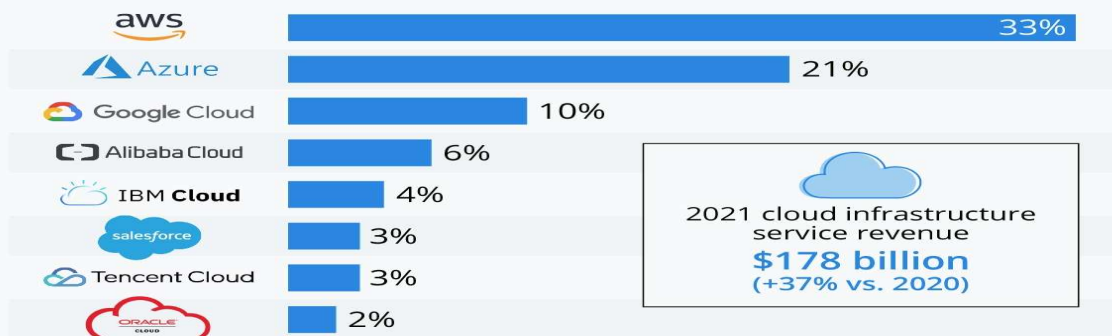
What is AWS?

Introduction to AWS

What is AWS ?

- AWS stands for Amazon Web Services that offers various IT services on demand using distributed IT infrastructure and offers flexible, reliable, scalable, and cost-effective cloud computing solutions.

- Amazon Web Services (AWS) is the world's most comprehensive and broadly adopted cloud platform, offering *nearly 200* fully-featured services from data centers globally.

Introduction to AWS

Amazon Leads $180-Billion Cloud Market

Worldwide market share of leading cloud infrastructure service providers in Q4 2021*

Provider	Market Share
aws	33%
Azure	21%
Google Cloud	10%
Alibaba Cloud	6%
IBM Cloud	4%
salesforce	3%
Tencent Cloud	3%
Oracle Cloud	2%

2021 cloud infrastructure service revenue
$178 billion
(+37% vs. 2020)

* includes platform as a service (PaaS) and infrastructure as a service (IaaS) as well as hosted private cloud services
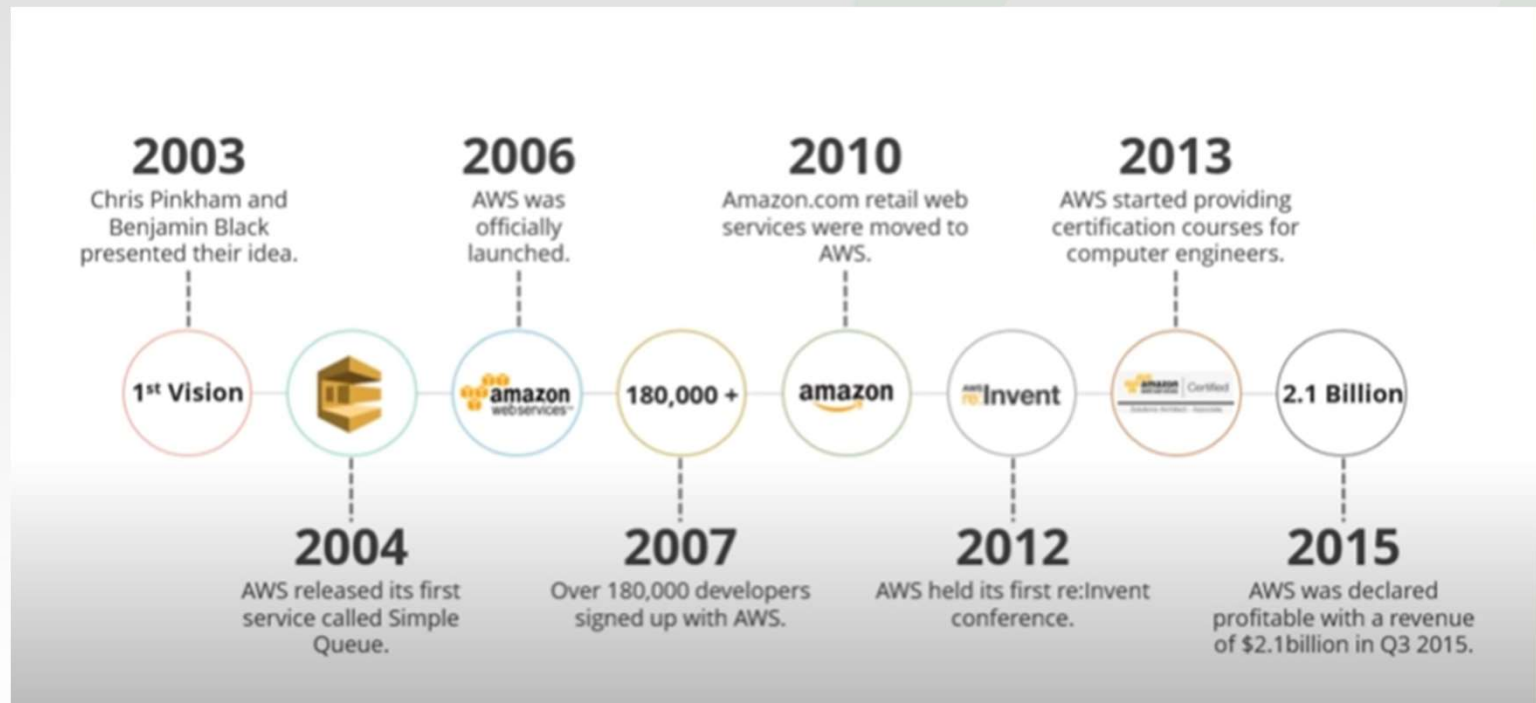Source: Synergy Research Group

statista
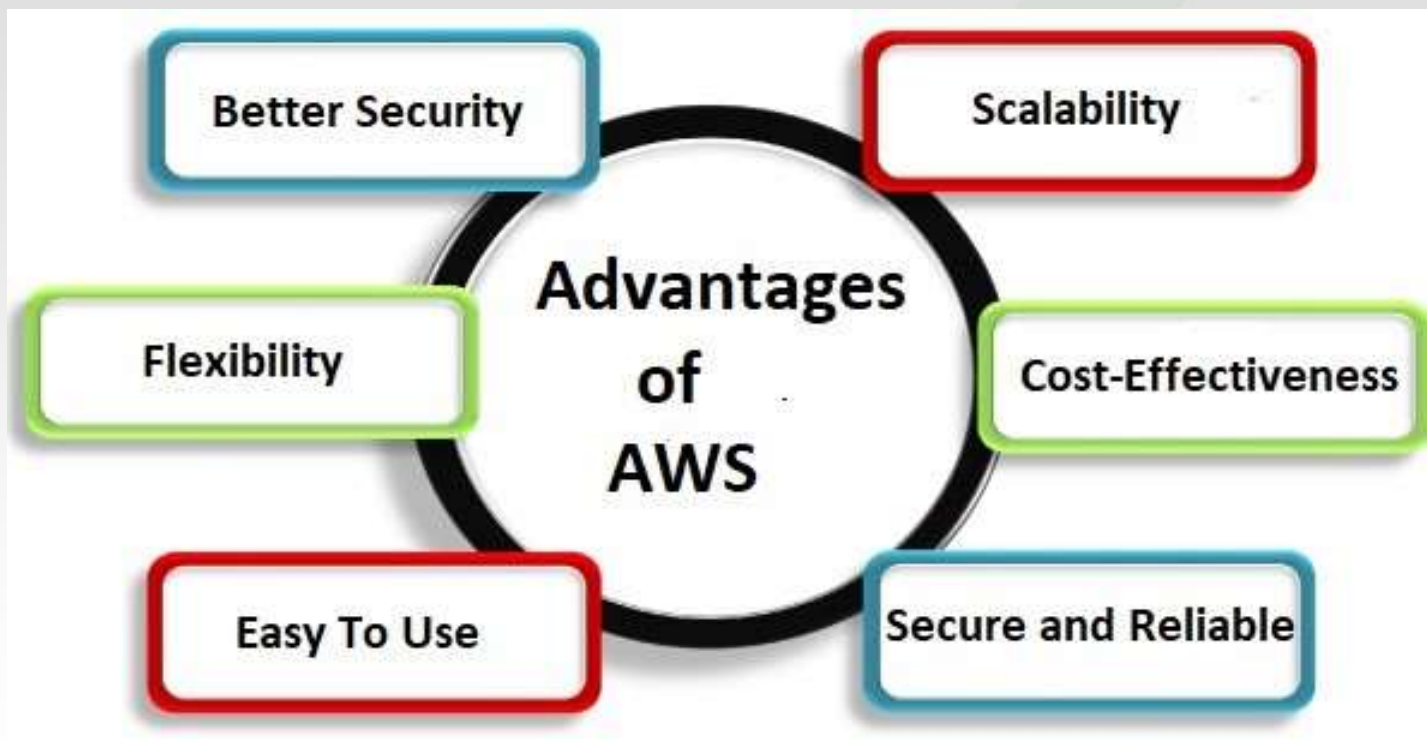
History of AWS

Introduction to AWS
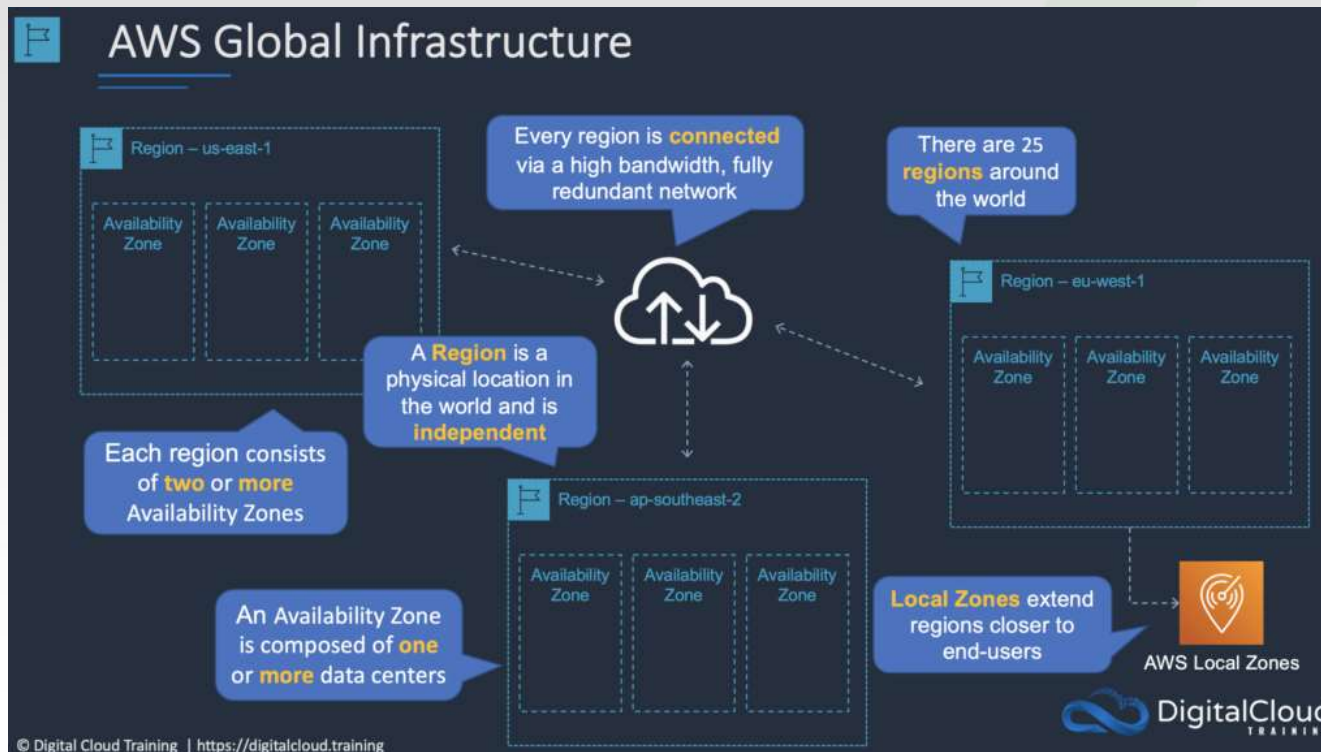
History of AWS
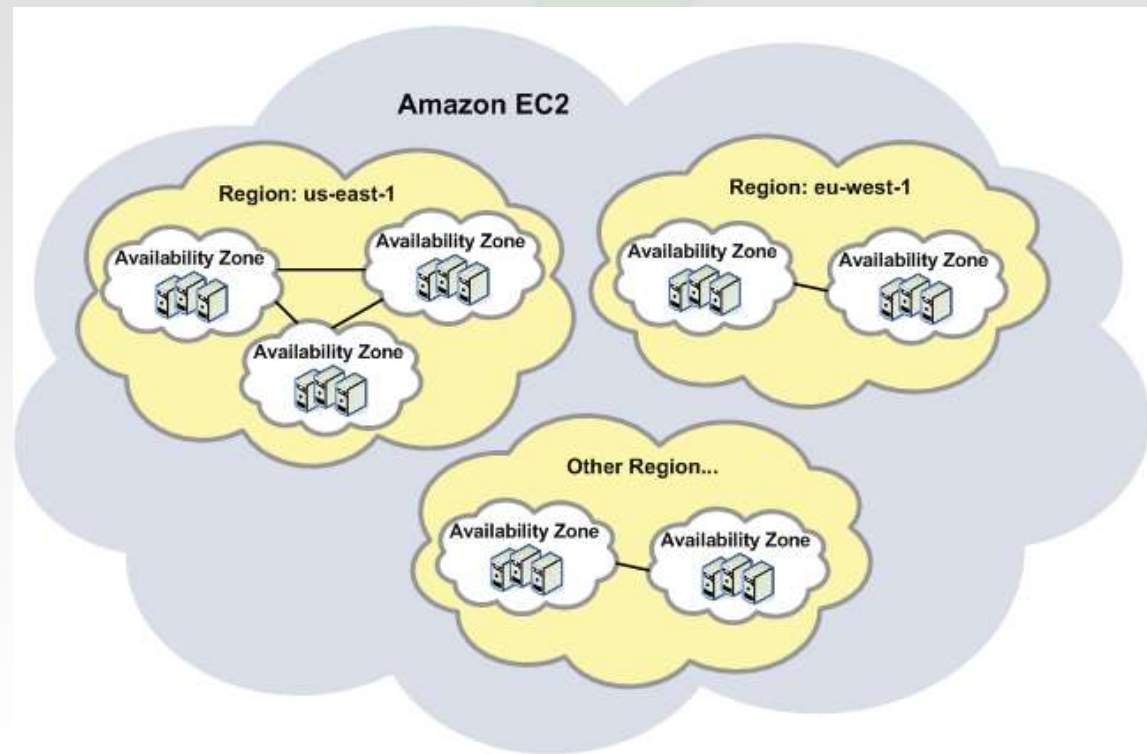
Features of AWS

Introduction to AWS

AWS Global Infrastructure

Introduction to AWS

AWS Global Infrastruture

Introduction to AWS

AWS Global Infrastruture

Introduction to AWS

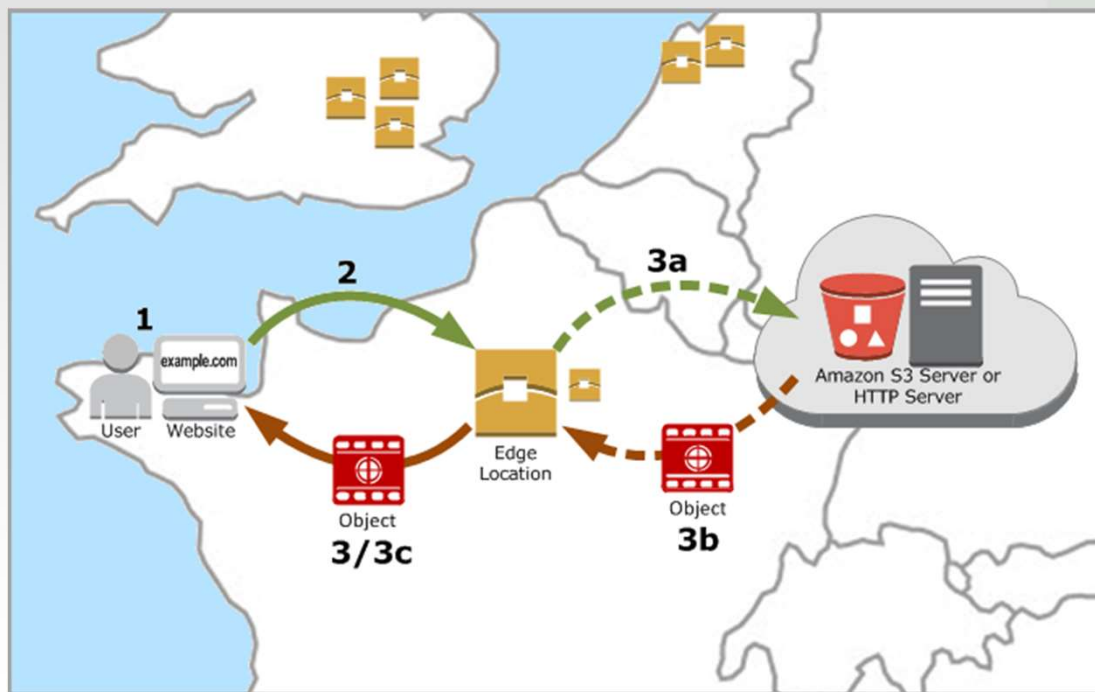**AWS Global Infrastructure**

Introduction to AWS

AWS Global Infrastructure

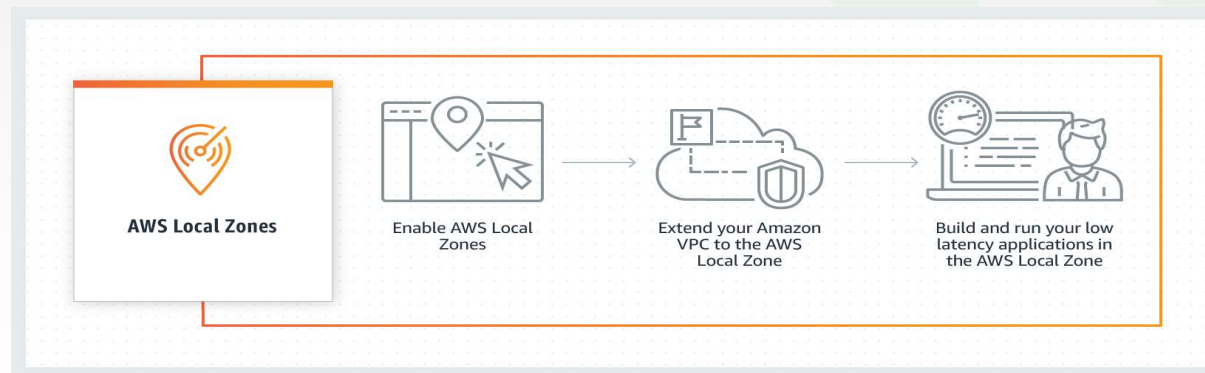# Introduction to AWS

AWS Edge Locations

Introduction to AWS

AWS Local Zones

- AWS Local Zones, you can easily run applications that need single-digit millisecond latency closer to end-users in a specific geography.

- AWS Local Zones are ideal for use cases such as media & entertainment content creation, real-time gaming, live video streaming, and machine learning inference.

AWS Free Tier

AWS Free Tier

Always free

These free tier offers do not expire and are available to all AWS customers

12 months free

Enjoy these offers for 12-months following your initial sign-up date to AWS

Trials

Short-term free trial offers are available through many different software solutions

- Services with a **12-month Free Tier** allow customers to use the product for free up to specified limits for one year from the date the account was created.
- Services with an **Always Free** offer allow customers to use the product for free up to specified limits as long as they are an AWS customer.
- Services with a **short term trial** are free to use for a specified period of time or up to a one-time limit depending on the service selected.

Introduction to AWS

The AWS Free Tier provides customers the ability to explore and try out AWS services free of charge up to specified limits for each service. You can explore more than **85 products** and start building on AWS using the free tier.

Introduction to AWS

AWS FREE TIER Billing Policy

> To avoid charges while on the Free Tier, you must keep your usage below the Free Tier limits.

- You are charged for any usage that exceeds the limits.

- To help you stay within the limits, you can track your Free Tier usage and *set a billing alarm to notify* you if you start incurring charges.

- If your application use exceeds the free tier limits, you simply pay standard, pay-as-you-go service rates.

- AWS Free Tier is applied to your monthly usage. It will expire on the 1st day of each month and does not accumulate.

> You can see current and past usage activity by service and region by logging into your account and going to the **Billing & Cost Management** Dashboard.

Free Tier Limits:

COMPUTE

Free Tier — 12 MONTHS FREE

Amazon EC2

750 Hours
per month

Resizable compute capacity in the Cloud.

750 hours per month of Linux, RHEL, or SLES t2.micro or t3.micro instance dependent on region

750 hours per month of Windows t2.micro or t3.micro instance dependent on region

Amazon DynamoDB

25 GB
of storage

Fast and flexible NoSQL database with seamless scalability.

25 GB of Storage

STORAGE

Free Tier — 12 MONTHS FREE

Amazon S3

5 GB
of standard storage

Secure, durable, and scalable object storage infrastructure.

5 GB of Standard Storage

MACHINE LEARNING

Free Tier — FREE TRIAL

Amazon SageMaker

250 Hours
per month of t2.medium notebook usage for the first two months

Fully managed platform to build, train, and deploy machine learning models.

DATABASE

Free Tier — 12 MONTHS FREE

Amazon RDS

750 Hours
per month of db.t2.micro database usage (applicable DB engines)

Managed Relational Database Service for MySQL, PostgreSQL, MariaDB, Oracle BYOL, or SQL Server.

COMPUTE

Free Tier — ALWAYS FREE

AWS Lambda

1 Million
free requests per month

Compute service that runs your code in response to events and automatically manages the compute resources.

AWS Certification

Professional

Two years of comprehensive experience designing, operating, and troubleshooting solutions using the AWS Cloud

Associate

One year of experience solving problems and implementing solutions using the AWS Cloud

Foundational

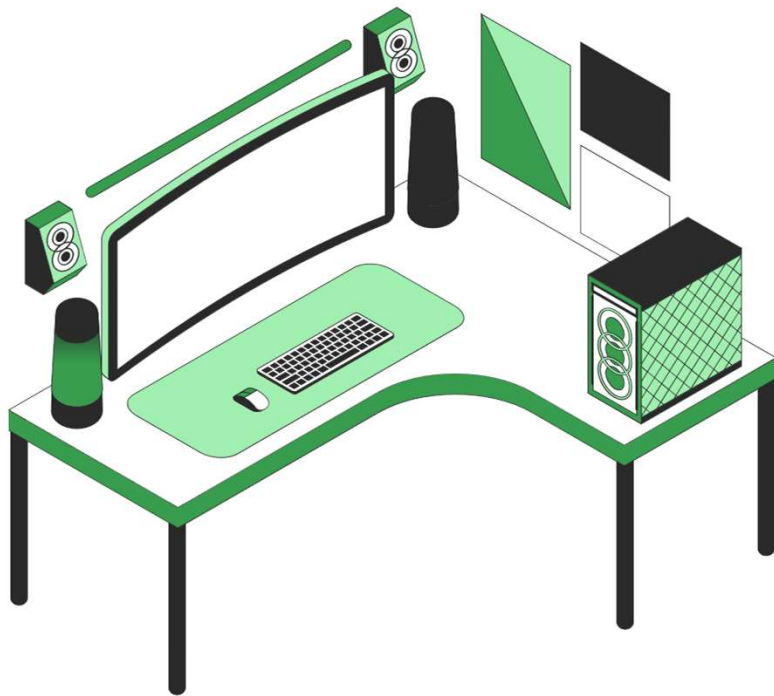**Six months** of fundamental AWS Cloud and industry knowledge

aws certified
Solutions Architect
Professional

aws certified
DevOps Engineer
Professional

aws certified
Solutions Architect
Associate

aws certified
SysOps Administrator
Associate

aws certified
Developer
Associate

Architect

Operations

Developer

Cloud Practitioner

aws certified
Cloud Practitioner

Specialty

Technical AWS Cloud experience in the Specialty domain as specified in the **exam guide**

aws certified
Advanced Networking
Specialty

aws certified
Data Analytics
Specialty

aws certified
Database
Specialty

aws certified
Machine Learning
Specialty

aws certified
Security
Specialty

AWS Billing Alarm

Do you have any questions?

Send it to us! We hope you learned something new.

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