

# Introduction to aws





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Introduction to aws



# What will we discuss?

- Definition of Cloud Computing
- Amazon's Cloud Computing offering
- AWS the global network
- AWS console and services
- The Free Tier account
- Setting up a WordPress site with AWS
- Next steps for learning more about AWS



# Workshop Goals

By the end of the workshop you should...

- **Have a better understanding of cloud computing and AWS**
- **Have first-hand experience with the AWS Console and some of the services**
- **Have the resources to continue learning and understand certification paths**



# What is the Cloud?

A simple definition of Cloud Computing





Introduction to **aws**  




Introduction to **aws**



# Hello AWS!

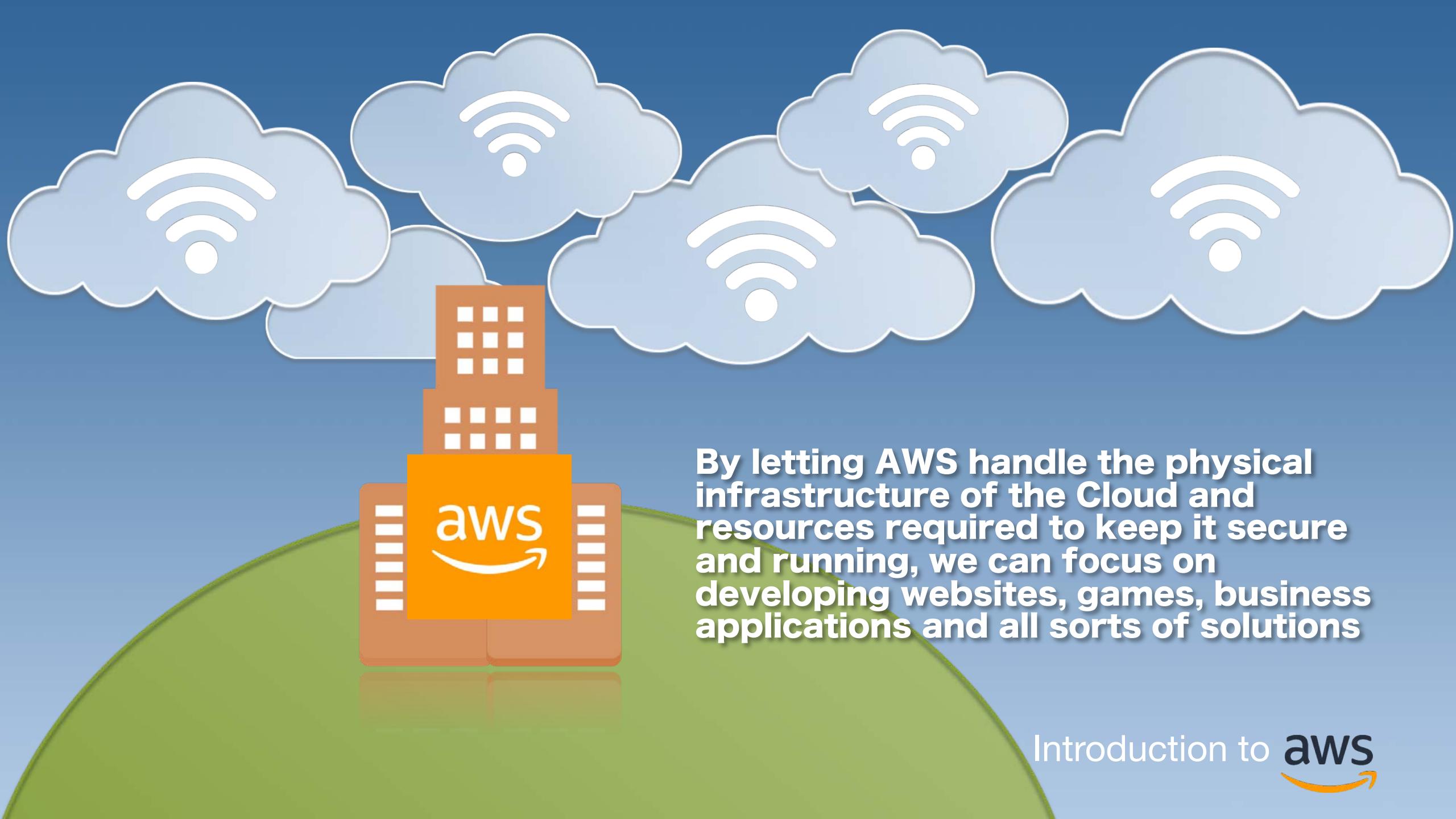
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AWS is Amazon's Cloud Computing offering





Introduction to **aws**  
amazon



**By letting AWS handle the physical infrastructure of the Cloud and resources required to keep it secure and running, we can focus on developing websites, games, business applications and all sorts of solutions**



# OK, but what is AWS?

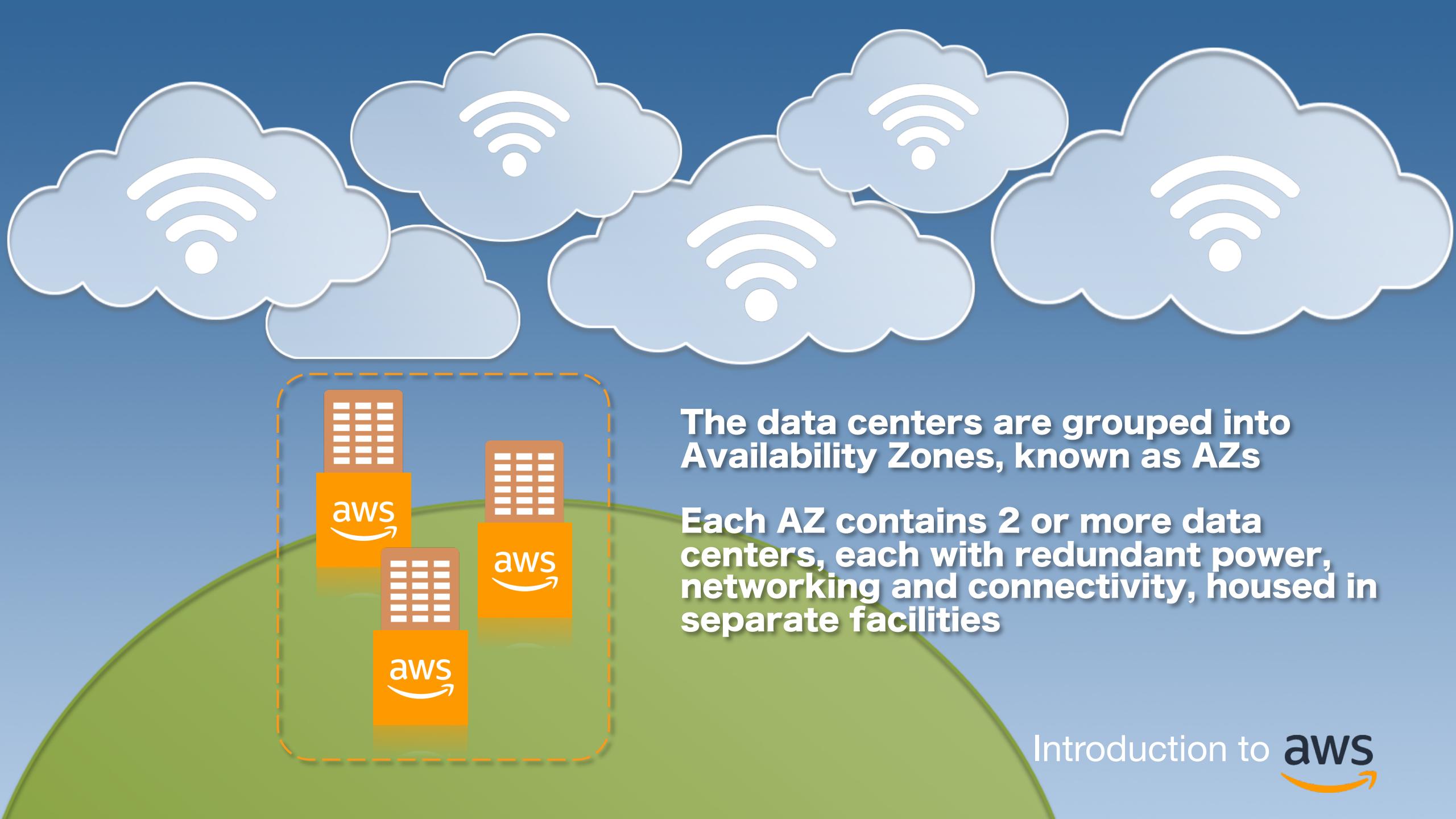
AWS is a global network of computing power!





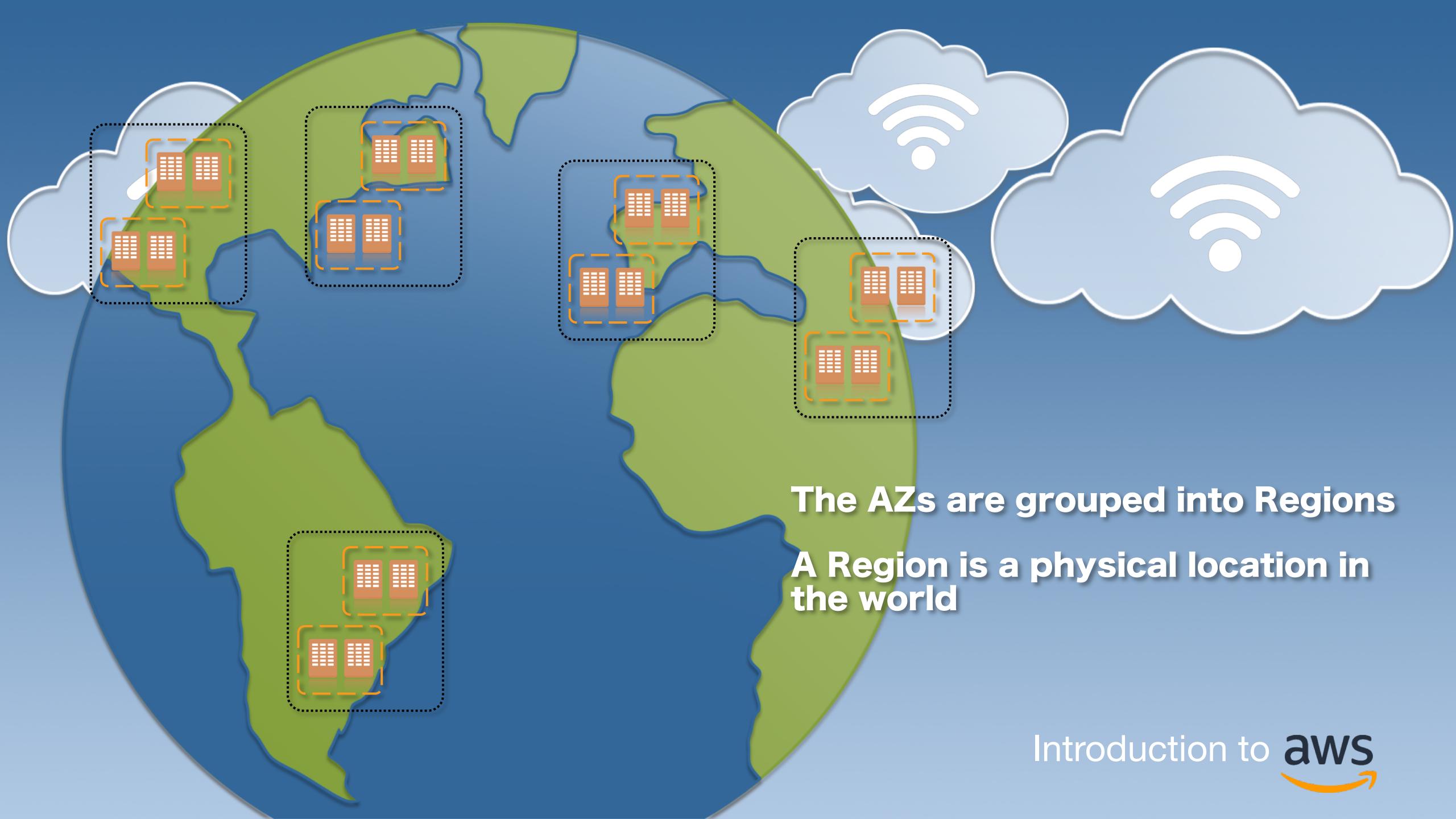
**The AWS Cloud infrastructure is made up of secure facilities built around the world**

**These facilities contain data centers**



**The data centers are grouped into Availability Zones, known as AZs**

**Each AZ contains 2 or more data centers, each with redundant power, networking and connectivity, housed in separate facilities**



**The AZs are grouped into Regions**  
**A Region is a physical location in the world**



<https://aws.amazon.com/what-is-aws/>

Introduction to **aws**



# The Services Part

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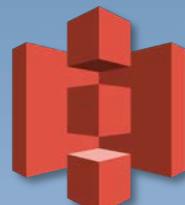
It's services! A collection of services!



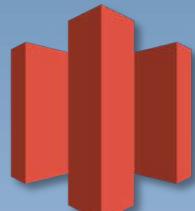
# Storage

# Compute

# Database



Amazon  
S3



Amazon  
Glacier



AWS Lambda



Amazon EC2



Elastic Load  
Balancing\*



Amazon  
RDS



Amazon  
DynamoDB

Introduction to aws

# AWS Documentation

Find user guides, developer guides, API references, tutorials, and more

## Guides and API References

### Compute

[AWS Batch](#)  
[Amazon EC2](#)  
[Amazon ECR](#)  
[Amazon ECS](#)  
[Amazon EKS](#)  
[AWS Elastic Beanstalk](#)  
[AWS Lambda](#)  
[Amazon Lightsail](#)  
[AWS Serverless](#)  
[Application Repository](#)  
[Amazon VPC](#)

### Storage

[Amazon EBS](#)  
[Amazon EFS](#)  
[Amazon Glacier](#)  
[Amazon S3](#)  
[AWS Snowball](#)  
[AWS Storage Gateway](#)

### Database

[Amazon Aurora](#)  
[Amazon DynamoDB](#)  
[Amazon ElastiCache](#)  
[Amazon Neptune](#)  
[Amazon RDS](#)

### Developer Tools

[AWS Cloud9](#)  
[AWS CodeBuild](#)  
[AWS CodeCommit](#)  
[AWS CodeDeploy](#)  
[AWS CodePipeline](#)  
[AWS CodeStar](#)  
[AWS Tools & SDKs](#)  
[AWS X-Ray](#)

### Management Tools

[AWS Auto Scaling](#)  
[AWS CloudFormation](#)  
[AWS CloudTrail](#)  
[Amazon CloudWatch](#)  
[AWS Command Line Interface](#)  
[AWS Config](#)  
[Amazon Data Lifecycle Manager](#)  
[AWS Health](#)  
[AWS Management Console](#)  
[AWS OpsWorks](#)  
[AWS Service Catalog](#)  
[AWS Systems Manager](#)  
[AWS Tools for Windows Powershell](#)  
[Trusted Advisor](#)

### Media Services

### Analytics

[Amazon Athena](#)  
[Amazon CloudSearch](#)  
[AWS Data Pipeline](#)  
[Amazon Elasticsearch Service](#)  
[Amazon EMR](#)  
[AWS Glue](#)  
[Amazon Kinesis](#)  
[Amazon QuickSight](#)  
[Amazon Redshift](#)

### Security, Identity, & Compliance

[AWS Artifact](#)  
[AWS Certificate Manager](#)  
[AWS CloudHSM](#)  
[Amazon Cognito](#)  
[AWS Crypto Tools](#)  
[AWS Directory Service](#)  
[AWS Firewall Manager](#)  
[Amazon Cloud Directory](#)  
[Amazon GuardDuty](#)  
[Identity & Access Management](#)  
[Amazon Inspector](#)  
[AWS Key Management Service](#)  
[Amazon Macie](#)  
[AWS Organizations](#)  
[AWS Secrets Manager](#)

### AR & VR

[Amazon Sumerian](#)  
**Customer Engagement**  
[Amazon Connect](#)  
[Amazon Pinpoint](#)  
[Amazon Simple Email Service \(SES\)](#)

### Game Development

[Amazon GameLift](#)  
[Amazon Lumberyard \(Beta\)](#)

### SDKs & Toolkits

[AWS Crypto Tools](#)  
[AWS Guide for .NET Developers](#)  
[AWS SDK for C++](#)  
[AWS SDK for Go](#)  
[AWS SDK for Java](#)  
[AWS SDK for JavaScript](#)  
[AWS SDK for .NET](#)  
[AWS SDK for PHP](#)  
[AWS SDK for Python \(Boto 3\)](#)  
[AWS SDK for Ruby](#)  
[AWS Toolkit for Eclipse](#)  
[AWS Toolkit for Visual Studio](#)  
[AWS Tools for Visual Studio Team Services](#)

View All Services



**Well documented!**

<https://aws.amazon.com/documentation/>

Introduction to  AWS



Services

Resource Groups



LearnAWS

N.

## AWS services

Find a service by name or feature (for example, EC2, S3 or VM, storage).



&gt; Recently visited services

vron All services

## Compute

- EC2
- Lightsail ↗
- Elastic Container Service
- EKS
- Lambda
- Batch
- Elastic Beanstalk

## Storage

- S3
- EFS
- Glacier
- Storage Gateway

## Database

- RDS
- DynamoDB
- ElastiCache
- Neptune

## Management Tools

- CloudWatch
- AWS Auto Scaling
- CloudFormation
- CloudTrail
- Config
- OpsWorks
- Service Catalog
- Systems Manager
- Trusted Advisor
- Managed Services

## Media Services

- Elastic Transcoder
- Kinesis Video Streams
- MediaConvert
- MediaLive
- MediaPackage
- MediaStore
- MediaTailor

## Mobile Services

- Mobile Hub
- AWS AppSync
- Device Farm
- Mobile Analytics

## AR &amp; VR

- Amazon Sumerian

## Application Integration

- Step Functions
- Amazon MQ
- Simple Notification Service
- Simple Queue Service
- SWF

## Customer Engagement

- Amazon Connect
- Pinpoint

## Helpful tips



Manage your costs  
Monitor your AWS cost reservations using AWS



Create an organization  
Use AWS Organizations management of multiple now

## Explore AWS

Machine Learning with Amazon  
The fastest way to build, train, and models. [Learn more.](#) ↗

Amazon Relational Database  
RDS manages and scales your data supports Aurora, MySQL, PostgreSQL and SQL Server. [Learn more.](#) ↗

AWS Fargate Runs Containers  
AWS Fargate works with Amazon



# The AWS Management Console

<https://console.aws.amazon.com/>

Introduction to



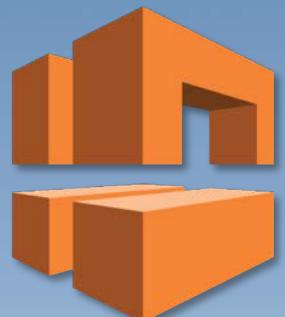
Compute

Compute

Compute



Amazon EC2



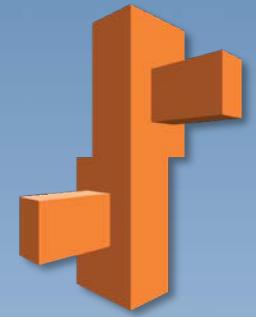
Amazon VPC



AWS Lambda



Elastic Load  
Balancing



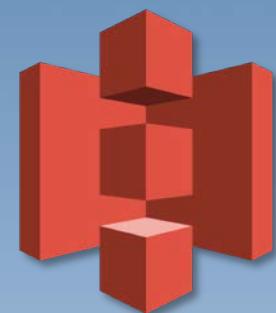
AWS Elastic  
Beanstalk



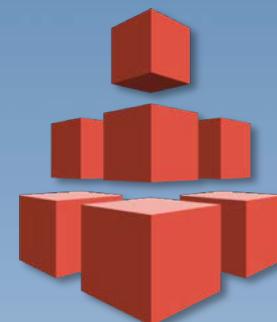
Storage

Storage

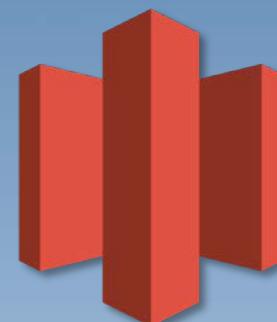
Storage



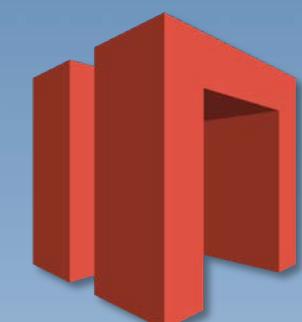
Amazon S3



Amazon EFS



Amazon Glacier



AWS Storage  
Gateway

Introduction to 

**Database**

**Database**

**Database**



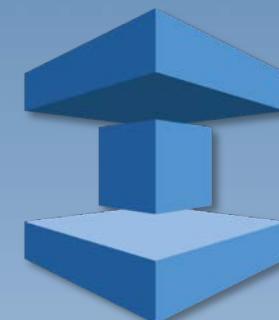
Amazon RDS



Amazon  
DynamoDB



Amazon  
DynamoDB  
Accelerator



Amazon  
ElasticCache

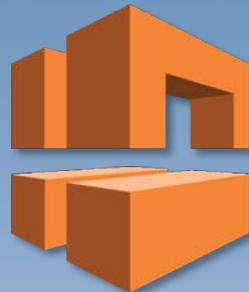
Introduction to aws

# Networking

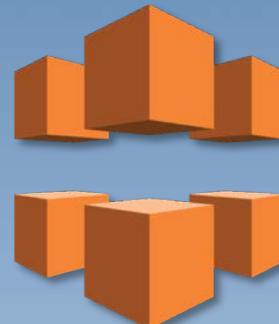
&

# Content

# Delivery



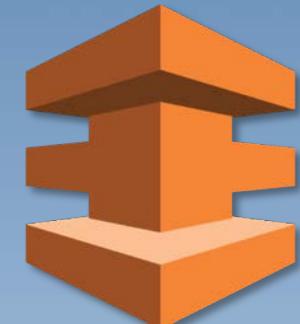
Amazon VPC



Amazon  
CloudFront



Amazon  
Route 53



AWS Direct  
Connect



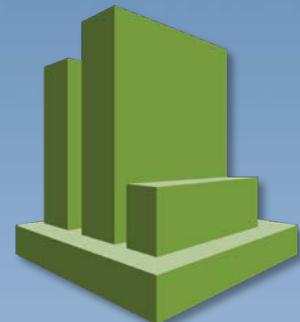
Elastic Load  
Balancing



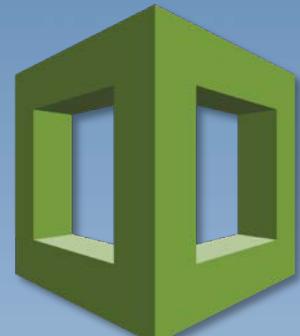
**Management  
Tools**

**Management  
Tools**

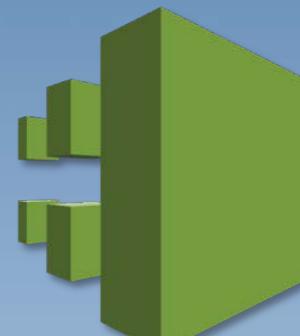
**Management  
Tools**



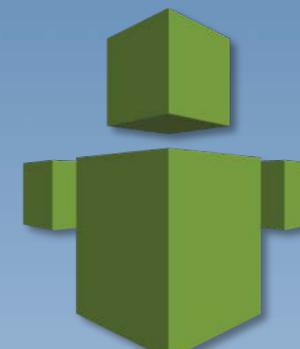
Amazon  
CloudWatch



AWS  
CloudFormation



AWS  
CloudTrail



AWS Trusted  
Advisor

Introduction to 



# I want access!

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The Free Tier Account





Contact Sales Products Solutions Pricing Getting Started Documentation AWS Marketplace

English My Account

Sign In to the Console

## AWS Free Tier

The AWS Free Tier enables you to gain free, hands-on experience with the AWS platform, products, and services.

Create a Free Account

Free Tier Details

Get Started

Free Tier Software

### AWS Free Tier Details

★ FEATURED

12 MONTHS FREE

ALWAYS FREE

TRIALS

PRODUCT CATEGORIES

ALL

12 months free and always free products

AWS Free Tier includes offers that expire 12 months following sign up and others that never expire.

[Learn more »](#)

COMPUTE  
**Amazon EC2**

**750 Hours**  
per month

Resizable compute capacity in the Cloud

[Learn more about Amazon EC2 »](#)

ANALYTICS  
**Amazon QuickSight**

**1 GB**

of SPICE capacity

Fast, easy-to-use, cloud-powered business analytics service at 1/10th the cost of traditional BI solutions

[Learn more about Amazon QuickSight »](#)

[EXPAND DETAILS](#)

[EXPAND DETAILS](#)

<https://aws.amazon.com/free/>



## AWS Free Tier Account

Introduction to 



# A tutorial

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## Launch a WordPress Site

This tutorial shows you how to get a website up and running with WordPress, installed on an Amazon EC2 instance.

We will learn how to configure and launch an EC2 instance, how to get your WordPress username and password, and how to log into your WordPress admin portal.

<https://aws.amazon.com/getting-started/tutorials/launch-a-wordpress-website/>



# Next steps

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Continue your AWS journey





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Sign In to the Console

Getting Started Resource Center

AWS Introduction

Use Cases

Products

SDKs and Toolkits

## Getting Started Resource Center

From core concepts to beginner tutorials, find the information you need to start building on AWS

Create an AWS Account

### Resources by Use Case



**Websites & Web Applications**  
13 Tutorials, 13 Projects, 3 Whitepapers



**Storage**  
3 Tutorials, 3 Projects, 1 Whitepaper



**Databases**  
5 Tutorials, 2 Projects, 3 Whitepapers, 1 Digital Training



**DevOps**  
3 Tutorials, 8 Projects, 5 Whitepapers, 1 Digital Training



**Machine Learning**  
11 Tutorials, 1 Project, 5 Digital Trainings



**Big Data & Analytics**  
1 Tutorial, 4 Projects, 1 Whitepaper, 2 Digital Trainings

[Browse all resources >>](#)

### Welcome to AWS



**Jeff Barr**, Chief Evangelist for Amazon Web Services

### 10-Minute Tutorials

Get started with a simple tutorial to get hands-on with an AWS product.



[1. Launch a Linux Virtual Machine](#)



## Getting Started Resource Center

<https://aws.amazon.com/getting-started/>

Introduction to **aws**



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Sign In to the Console

# AWS Certification

Validate technical skills and expertise with an industry-recognized credential and grow your career

Training and Certification

Training Overview

AWS Certification

Recertification

APN Partner Training

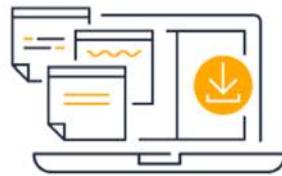
FAQs



## AWS Certification

Learn how our role-based and specialty certifications help you demonstrate your deep AWS knowledge

[Learn more »](#)



## Exam Prep Resources

Prepare for certification exams with training and materials that complement your hands-on AWS experience

[View resources »](#)



## Certification Benefits

Claim benefits to help showcase your achievement and advance your AWS expertise

[Explore benefits »](#)

Ready to begin your AWS Certification journey?

[Get started at aws.training](#)

<https://aws.amazon.com/certification/>



# AWS Certifications





Professional

AWS Certified  
**Solutions Architect**  
- Professional

Associate

AWS Certified  
**Solutions Architect**  
- Associate

Foundational

AWS Certified  
**Cloud Practitioner**



Cloud Practitioner

AWS Certified  
**Cloud Practitioner**  
optional



Architect

## Role-Based Certifications

AWS Certified  
**DevOps Engineer**  
- Professional

AWS Certified  
**Developer**  
- Associate

AWS Certified  
**Cloud Practitioner**  
optional



Developer

AWS Certified  
**DevOps Engineer**  
- Professional

AWS Certified  
**SysOps Administrator**  
- Associate

AWS Certified  
**Cloud Practitioner**  
optional



Operations

## Specialty Certifications



AWS Certified  
**Advanced Networking**  
- Specialty



AWS Certified  
**Big Data**  
- Specialty



AWS Certified  
**Security**  
- Specialty

Specialty Certification requires  
Cloud Practitioner or  
Associate-level certification



# Thank you!

Introduction to **aws**  


# Introduction to aws



## Resources

AWS Console - <https://console.aws.amazon.com/>

AWS Free Tier Account - <https://aws.amazon.com/free/>

AWS Documentation - <https://aws.amazon.com/documentation/>

AWS Getting Started - <https://aws.amazon.com/getting-started/>

AWS Certification - <https://aws.amazon.com/certification/>

AWS White Papers - <https://aws.amazon.com/whitepapers/>

Icons used in this presentation - [aws.amazon.com/architecture/icons](https://aws.amazon.com/architecture/icons)

Presentation slides - <https://github.com/mirella4real/presentations/tree/2018/ATXDivHackathon>