

Introduction to aws





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Software Engineer at Comcast Austin Innovation Center



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Introduction to aws



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Introduction to aws



What We'll 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...

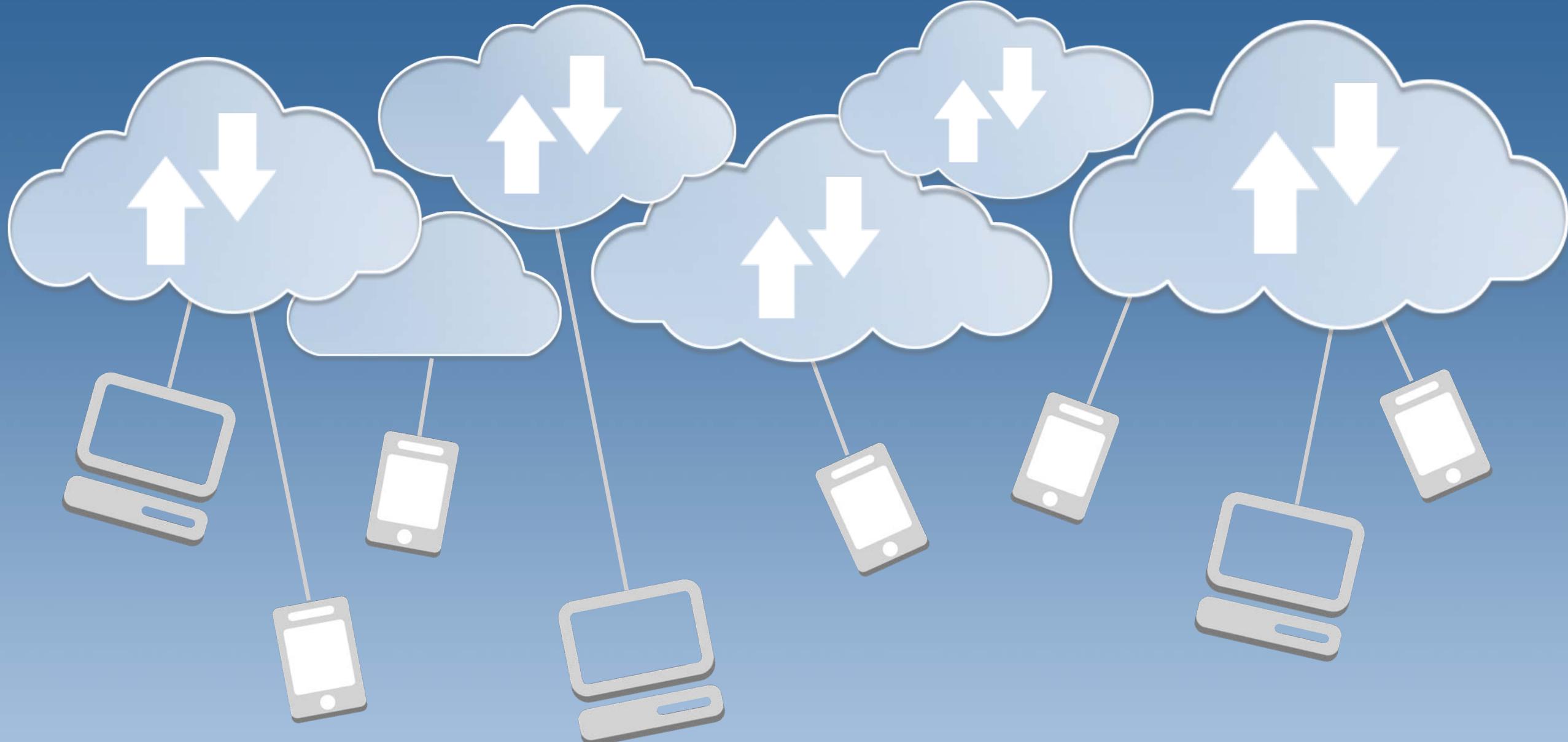
- **Have a better understanding of cloud computing and AWS**
- **Have first-hand experience with the AWS Console and some of the services**
- **Have the resources to continue learning and understand certification paths**



What is the Cloud?

A simple definition of Cloud Computing





Introduction to **aws**



Introduction to **aws**



Hello AWS!

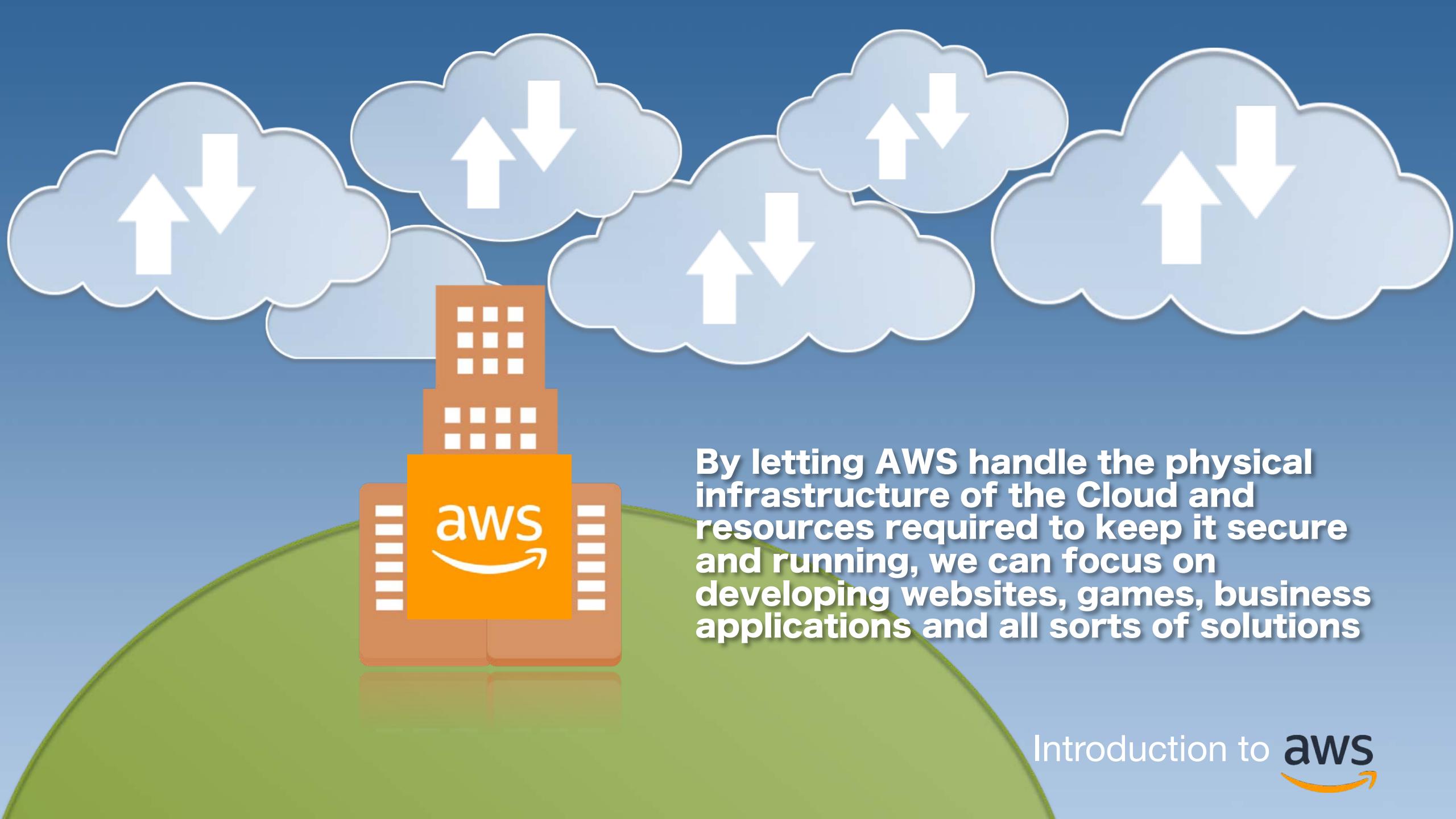
AWS is Amazon's Cloud Computing offering





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

Introduction to **aws**
The Amazon Web Services logo is displayed below the word 'aws'.



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



What's the big deal?

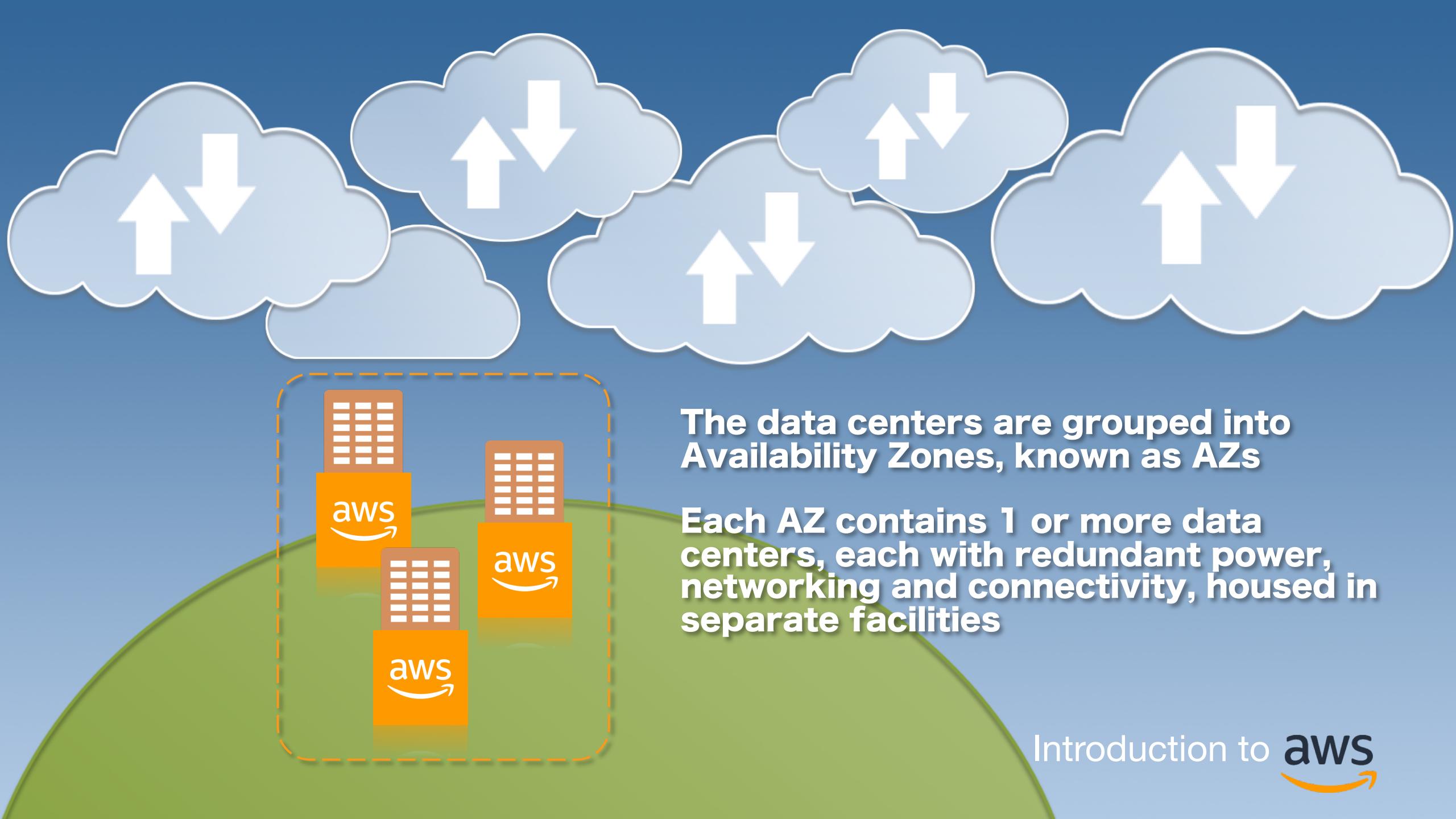
AWS is a global network of computing power!

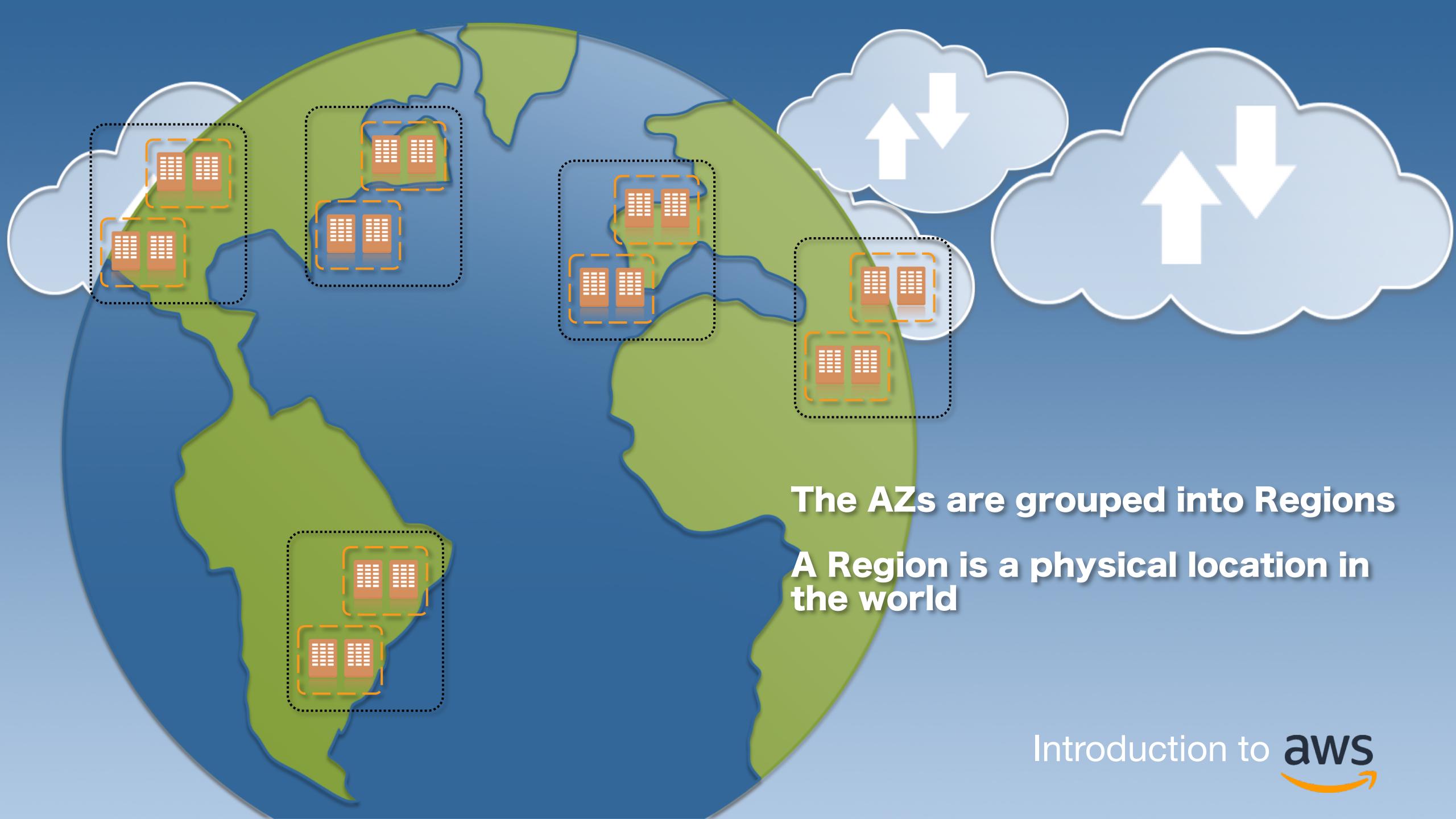




The AWS Cloud infrastructure is made up of secure facilities built around the world

These facilities contain data centers





The 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

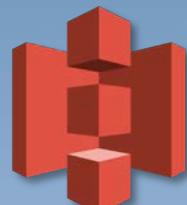
It's services! A collection of services!



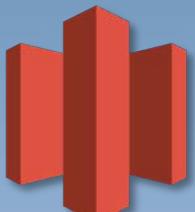
Storage

Compute

Database



Amazon
S3



Amazon
Glacier



AWS Lambda



Amazon EC2



Elastic Load
Balancing*



Amazon
RDS



Amazon
DynamoDB

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 | View All Topics | Search Documentation

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

Well documented!

Introduction to 



Services

Resource Groups



LearnAWS

N.

AWS services

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



> 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 & 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 database supports Aurora, MySQL, PostgreSQL and SQL Server. [Learn more.](#)

AWS Fargate Runs Container

AWS Fargate works with Amazon

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

Introduction to



Compute

Compute

Compute



Amazon EC2



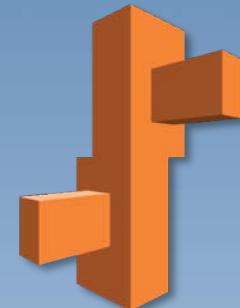
Amazon VPC



AWS Lambda



Elastic Load
Balancing

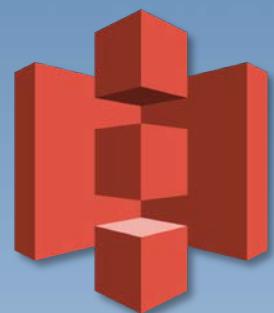


AWS Elastic
Beanstalk

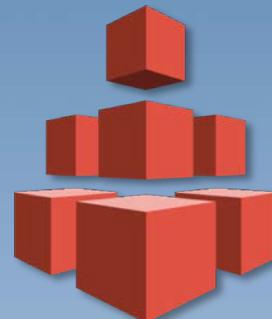
Storage

Storage

Storage



Amazon S3



Amazon EFS



Amazon Glacier



AWS Storage
Gateway

Database

Database

Database



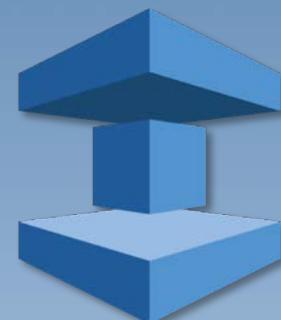
Amazon RDS



Amazon
DynamoDB

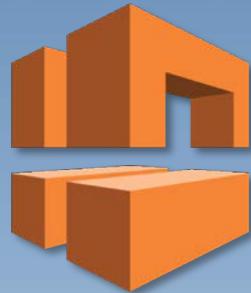


Amazon
DynamoDB
Accelerator

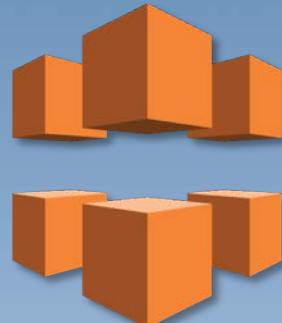


Amazon
ElasticCache

Networking & Content Delivery



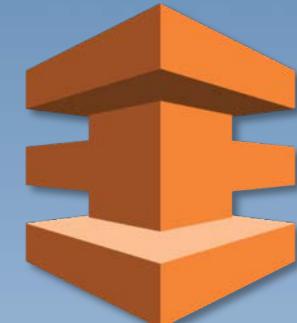
Amazon VPC



Amazon
CloudFront



Amazon
Route 53



AWS Direct
Connect

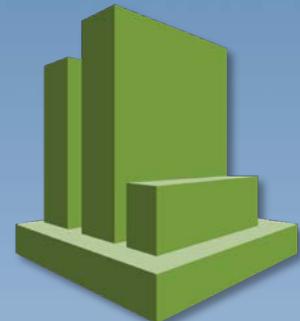


Elastic Load
Balancing

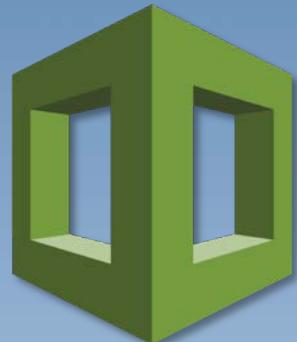
**Management
Tools**

**Management
Tools**

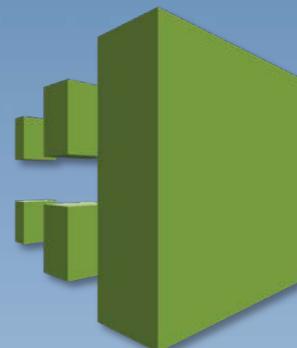
**Management
Tools**



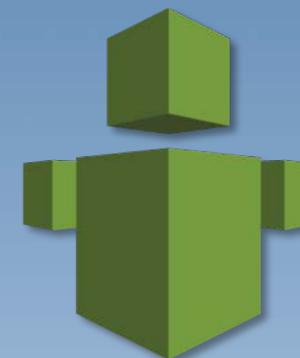
Amazon
CloudWatch



AWS
CloudFormation



AWS
CloudTrail



AWS Trusted
Advisor



I want access!

The Free Tier Account





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/>

Introduction to **aws**





English ▾

AWS Accounts
Include
12 Months of Free
Tier Access

Including use of Amazon EC2, Amazon S3,
and Amazon DynamoDB

Visit aws.amazon.com/free for full offer terms

Create an AWS account

Email address

mirella_batista@comcast.com

Password

.....

Confirm password

.....

AWS account name ⓘ

MyFreeTierAccount

Continue

[Sign in to an existing AWS account](#)

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**AWS
Free Tier Account**

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

Introduction to **aws**



English ▾

Contact Information

All fields are required.

Please select the account type and complete the fields below with your contact details.

Account type ⓘ

Professional Personal

Full name

MyFreeTierAccount

Company name

Phone number

Country/Region

United States

Address

Street, P.O. Box, Company Name, c/o

Apartment, suite, unit, building, floor, etc.

City

State / Province or region

Postal code

Check here to indicate that you have
read and agree to the terms of the [AWS
Customer Agreement](#)

Create Account and Continue



English ▾

Payment Information

Please type your payment information so we can verify your identity. We will not charge you unless your usage exceeds the [AWS Free Tier Limits](#). Review [frequently asked questions](#) for more information.

Credit/Debit card number

Expiration date

09 2018

Cardholder's name

Billing address

Use my contact address

6200 Bridge Point Pkwy Bldg 4, Ste 500
Austin TX 78730
US

Use a new address

Secure Submit

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Introduction to **aws**

aws

English ▾

Phone Verification

AWS will call you immediately using an automated system. When prompted, enter the 4-digit number from the AWS website on your phone keypad.

Provide a telephone number

Please enter your information below and click the "Call Me Now" button.

Country/Region code

United States (+1)

Phone number Ext

5125174207

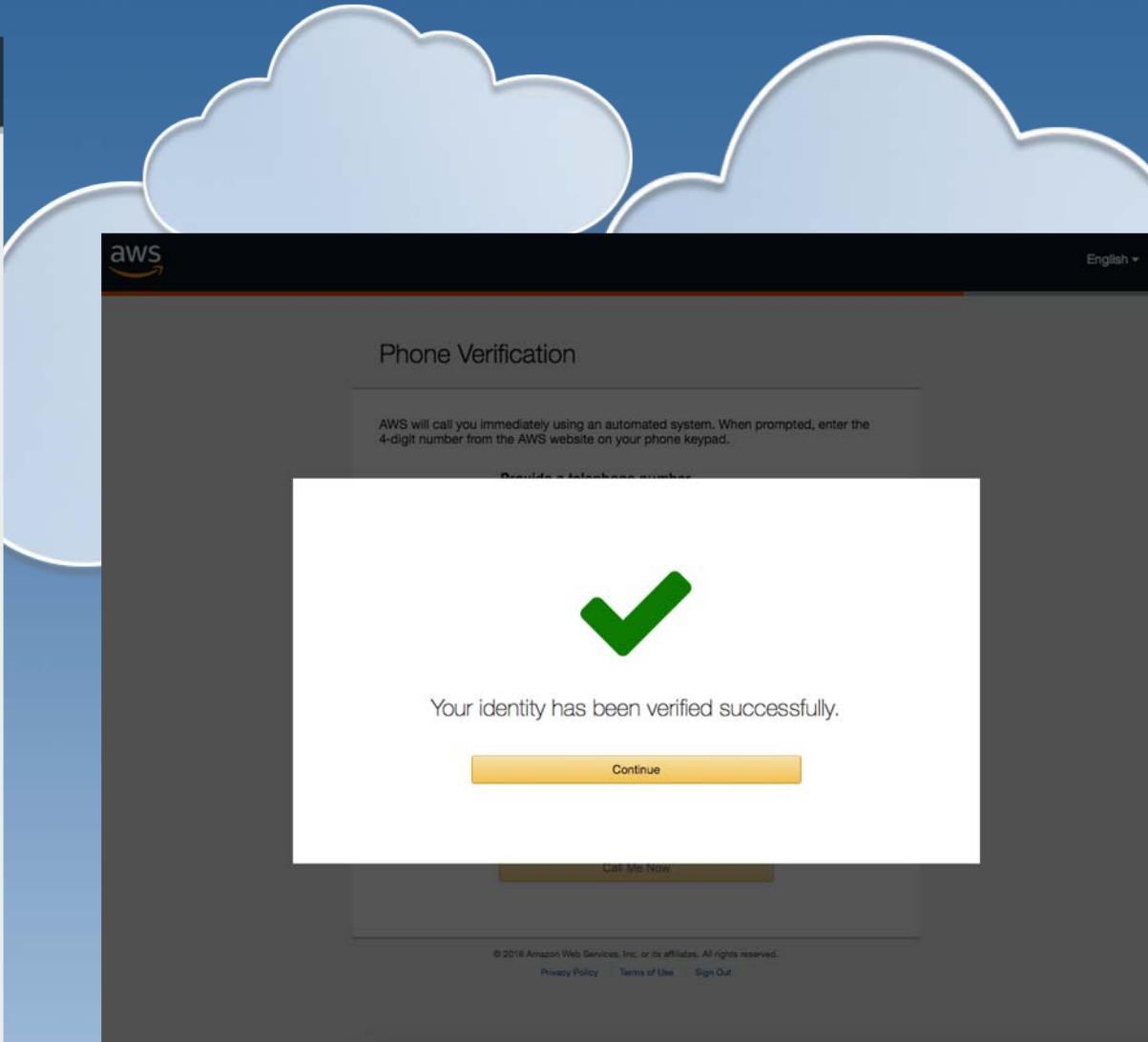
Security Check

5faaa4

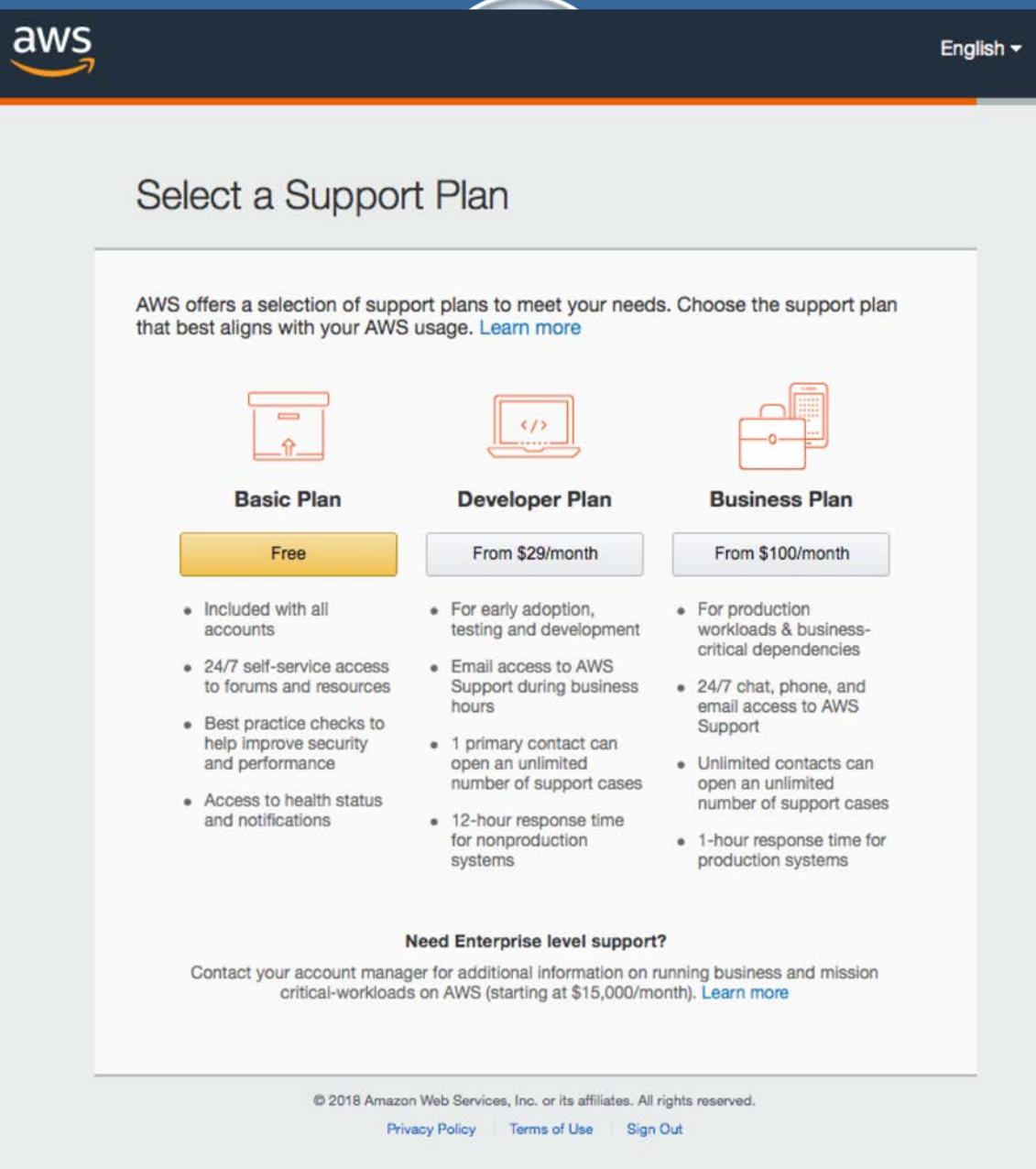
Please type the characters as shown above

Call Me Now

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Introduction to **aws**



The screenshot shows the AWS Support Plan selection page. At the top left is the AWS logo. At the top right is a language dropdown set to "English". Below the header, the title "Select a Support Plan" is displayed. A sub-header states: "AWS offers a selection of support plans to meet your needs. Choose the support plan that best aligns with your AWS usage." A "Learn more" link is provided. Three support plan options are shown in a grid:

Basic Plan	Developer Plan	Business Plan
Free	From \$29/month	From \$100/month
<ul style="list-style-type: none">Included with all accounts24/7 self-service access to forums and resourcesBest practice checks to help improve security and performanceAccess to health status and notifications	<ul style="list-style-type: none">For early adoption, testing and developmentEmail access to AWS Support during business hours1 primary contact can open an unlimited number of support cases12-hour response time for nonproduction systems	<ul style="list-style-type: none">For production workloads & business-critical dependencies24/7 chat, phone, and email access to AWS SupportUnlimited contacts can open an unlimited number of support cases1-hour response time for production systems

A section titled "Need Enterprise level support?" encourages users to contact their account manager for enterprise-level support starting at \$15,000/month. A "Learn more" link is also present.

At the bottom, copyright information from 2018 is shown, along with links to Privacy Policy, Terms of Use, and Sign Out.

AWS Free Tier Account

Introduction to 



A tutorial

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/>

aws

Contact Sales Support English My Account Sign Up

Products Solutions Pricing Learn Partner Network AWS Marketplace Explore More Q

Getting Started Resource Center AWS Introduction Use Cases Products SDKs and Toolkits

10-Minute Tutorials

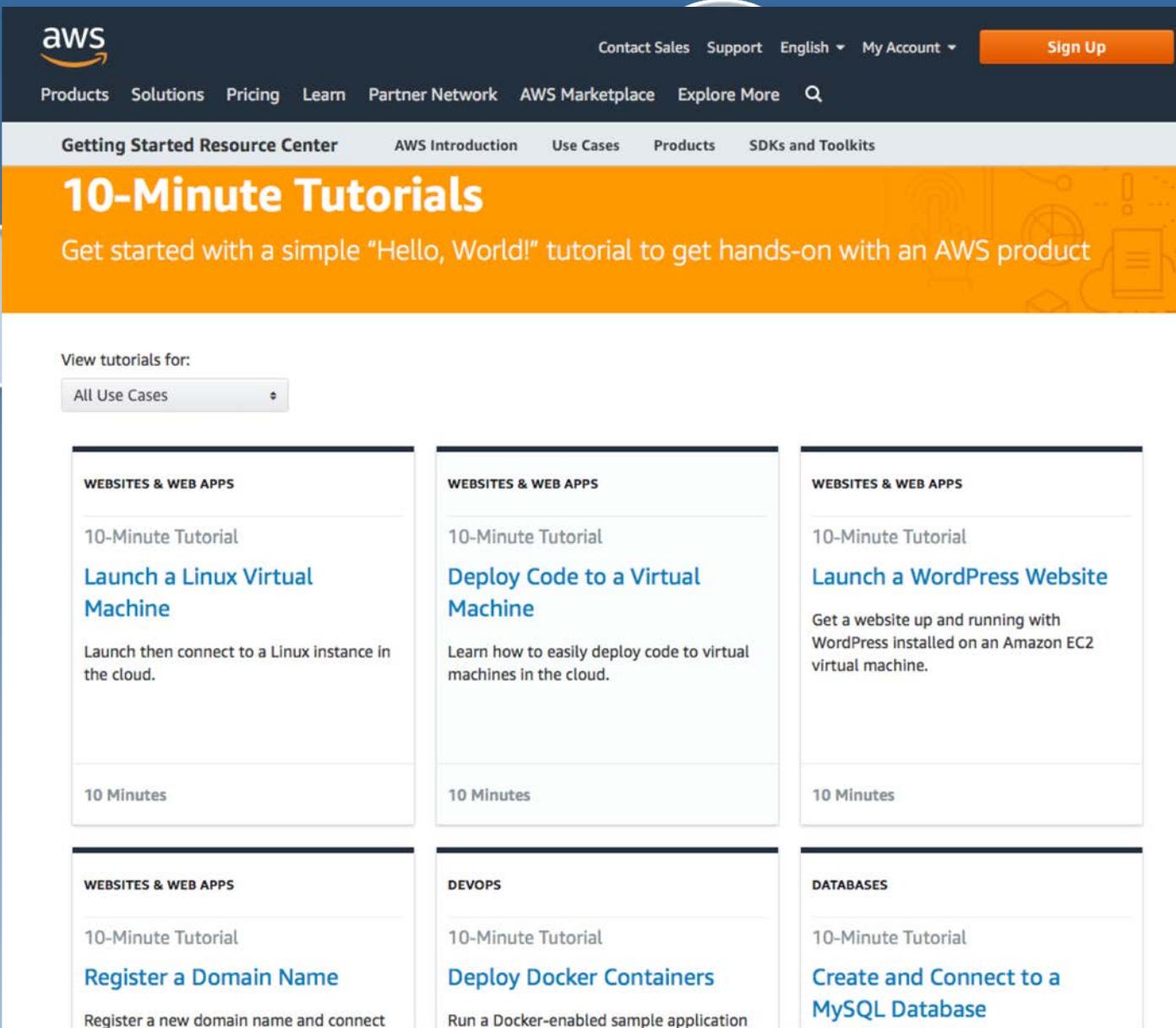
Get started with a simple "Hello, World!" tutorial to get hands-on with an AWS product

View tutorials for:

All Use Cases

WEBSITES & WEB APPS	WEBSITES & WEB APPS	WEBSITES & WEB APPS
10-Minute Tutorial Launch a Linux Virtual Machine Launch then connect to a Linux instance in the cloud.	10-Minute Tutorial Deploy Code to a Virtual Machine Learn how to easily deploy code to virtual machines in the cloud.	10-Minute Tutorial Launch a WordPress Website Get a website up and running with WordPress installed on an Amazon EC2 virtual machine.
10 Minutes	10 Minutes	10 Minutes

WEBSITES & WEB APPS	DEVOPS	DATABASES
10-Minute Tutorial Register a Domain Name Register a new domain name and connect	10-Minute Tutorial Deploy Docker Containers Run a Docker-enabled sample application	10-Minute Tutorial Create and Connect to a MySQL Database



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

Introduction to **aws**



Next steps

Continue your AWS journey





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English My Account

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

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



Getting Started Resource Center

Introduction to



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English My Account

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/>

Introduction to **aws**



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

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