

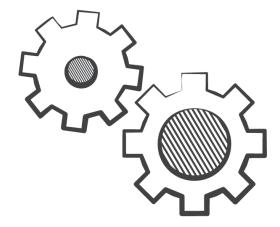
## AWSOME DAY ONLINE CONFERENCE



## Introduction and Logistics

#### Your presenters today:

- John Balsillie
   Senior Technical Trainer, AWS APAC
- Karthik Chandy
   Senior Technical Trainer, AWS APAC







## Course Objectives

#### This course teaches you how to:

- Recognize terminology and concepts as they relate to the AWS platform and navigate the AWS Management Console.
- Understand the **foundational services**, including Amazon Elastic Compute Cloud (EC2), Amazon Virtual Private Cloud (VPC), Amazon Simple Storage Service (S3), and Amazon Elastic Block Store (EBS).
- Understand the **security** measures AWS provides and key concepts of AWS Identity and Access Management (IAM).
- Understand AWS **database** services, including Amazon DynamoDB and Amazon Relational Database Service (RDS).
- Understand AWS management tools, including Auto Scaling, Amazon CloudWatch, Elastic Load Balancing (ELB), and AWS Trusted Advisor.





## Module Layout

- Module 1: AWS Introduction and History
- Module 2: AWS Infrastructure Compute, Storage and Networking
- Module 3: Security, Identity and Access Management
- Module 4: Databases
- Module 5: AWS Elasticity and Management Tools





# **Module 1 Introduction and History of AWS**





## Amazon History



the company.









2005: Amazon Publishing was launched 2007: Kindle was launched. **2012**: Amazon Game Studios was launched.

**2014**: Amazon Prime Now was launched.





















2015:

1995: Amazon.com launched its online bookstore.



2006: Amazon Web Services (AWS) was



launched.

2011: Amazon Fresh was launched.



2013: Amazon Art was



Amazon Home Services and Amazon Echo were

amazon echo







## Amazon Web Services (AWS)

Enable businesses and developers to use web services to build scalable, sophisticated applications.









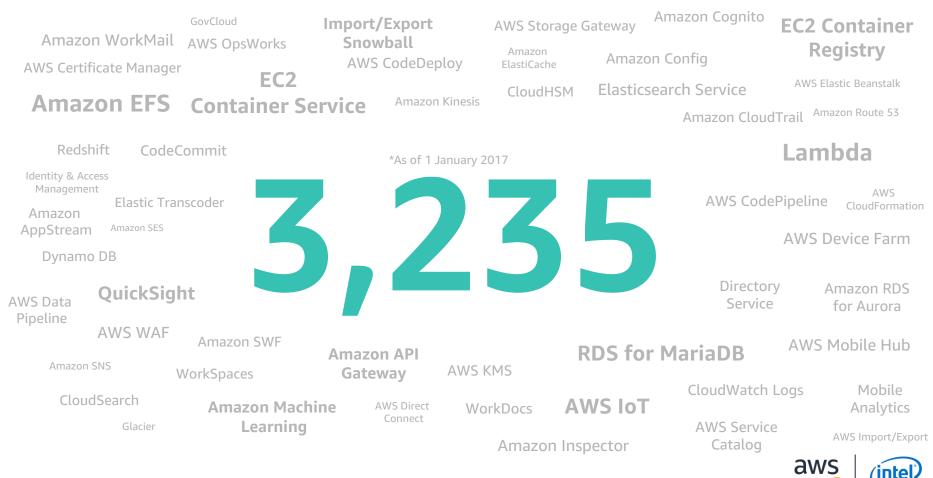
### AWS Pace of Innovation

AWS has been continually expanding its services to support virtually any cloud workload, and it now has more than 90 services that range from compute, storage, networking, 1,01 database, analytics, application services, deployment, management, developer, mobile, Internet of Things (IoT), Artificial Intelligence (AI), security, hybrid and enterprise applications. AWS has launched a total of 1,017 new features and/or services year to date\* - for a total of 2,913 new features and/or services since inception in 2006. 516 2010 2012 2016 2014





<sup>\*</sup> As of 1 January 2017



## **AWS Customers**

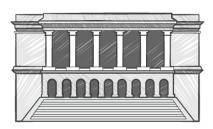
#### **Enterprise Customers**

Amazon Web Services delivers a mature set of services specifically designed for the unique security, compliance, privacy, and governance requirements of large organizations.



#### **Public Sector**

Paving the way for innovation and supporting world-changing projects in government, education and nonprofit organizations.



#### Startups

From the spark of an idea, to your first customer, to IPO and beyond, let Amazon Web Services help you build and grow your startup.







## Advantages and Benefits of AWS Cloud Computing



Trade capital expense for variable expense.



Increase speed and agility.



Benefit from massive economies of scale.



Stop spending money on running and maintaining data centers.



Stop guessing capacity.



Go global in minutes.





### AWS Positioned as a Leader

in the Gartner Magic Quadrant for Cloud Infrastructure as a Service, Worldwide\*

AWS is positioned highest in execution and furthest in vision within the Leaders Quadrant

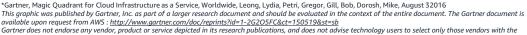


Figure 1. Magic Quadrant for Cloud Infrastructure as a Service. Worldwide

COMPLETENESS OF VISION \_\_\_\_\_

ION ———

Source: Gartner (August 2016)



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## **AWS Core Infrastructure and Services**











Security







Firewalls

ACLs

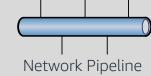
Administrators

Security Groups

Network ACLs A'

**AWS IAM** 







Networking







Servers







**On-Premises Servers** 

l Amaz

Amazon EC2 Instances







RDBMS

Storage and Database









Amazon RDS

## **AWS Cloud Computing**

#### **Applications**





Collaboration and Sharing

## **Platform Services**

#### Databases

Relational

NoSQL

Caching

#### **Analytics**

Cluster Computing

Real-time

Data Warehouse

Data Workflows

#### **App Services**

Queuing

Orchestration

App Streaming

Transcoding

Email

Search

## Deployment and Management

Containers

Dev/ops Tools

Resource Templates

Usage Tracking

Monitoring and Logs

#### **Mobile Services**

Identity

Sync

Mobile Analytics

**Notifications** 

Foundation Services



Compute (Virtual, Auto-scaling and Load Balancing)



Networkin



Storage (Object, Block and Archive)

Infrastructure

Regions

Availability Zones



**Edge Locations** 

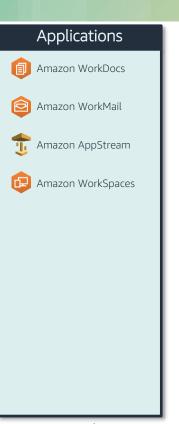
## **AWS Foundation Services**















## **AWS Platform Services**

Databases	Analytics	Application Services	Management Tools	Developer Tools	Mobile Services	Internet of Things
Amazon DynamoDB	Amazon Athena	Amazon API Gateway	Amazon CloudWatch	AWS CodeBuild	Amazon API Gateway	AWS IoT
Amazon ElastiCache	Amazon CloudSearch	Amazon AppStream 2.0	AWS CloudFormation	AWS CodeCommit	Amazon Cognito	AWS Greengrass
Amazon RDS	Amazon EMR	Amazon Elastic	AWS CloudTrail	AWS CodeDeploy	Amazon Mobile Analytics	
Amazon Redshift	Amazon ES	Transcoder  Amazon SWF	AWS Config	AWS CodePipeline	Amazon Pinpoint	
	Amazon Kinesis		AWS Managed Services	AWS X-Ray	AWS Device Farm	
	Amazon QuickSight	AWS Step Functions	AWS OpsWorks		AWS Mobile Hub	
	Amazon Redshift		AWS Service Catalog		· · · · · · · · · · · · · · · · · · · ·	
			AWS Trusted Advisor			





## AWS Global Infrastructure

#### Regions

- Geographic locations
- Consist of at least two Availability Zones

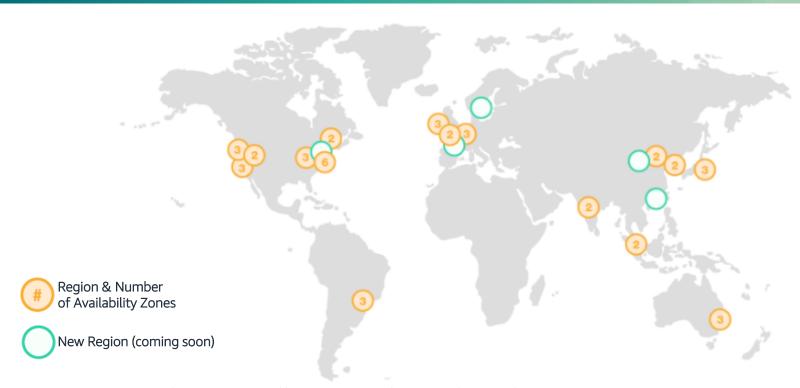
#### **Availability Zones**

- Clusters of data centers
- Isolated from failures in other Availability Zones





## AWS Global Infrastructure



View the latest Global Infrastructure : <a href="http://aws.amazon.com/about-aws/global-infrastructure">http://aws.amazon.com/about-aws/global-infrastructure</a>



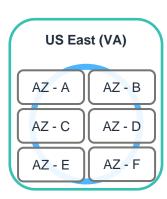


## AWS Global Infrastructure

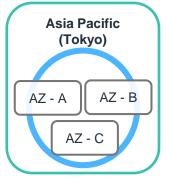
At least 2 Availability Zone per region.

#### Examples:

- US East (N. Virginia)
  - us-east-1a
  - us-east-1b
  - us-east-1c
  - us-east-1d
  - us-east-1e
  - us-east-1f



- Asia Pacific (Tokyo)
  - ap-northeast-1a
  - ap-northeast-1b
  - ap-northeast-1c

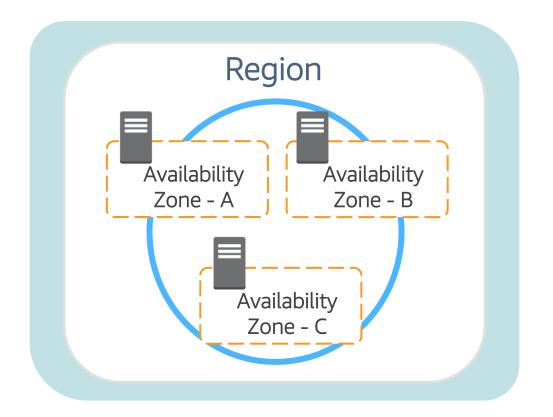


Note: Conceptual drawing only. The number of Availability Zones (AZ) may vary.





## High Availability Using Multi-AZ Deployments







## AWS Global Infrastructure – Edge Locations

- 80+ edge locations
- Local points of presence that support AWS services like:

- 1 Amazon Route 53
- Amazon CloudFront
- **...** AWS WAF
- M AWS Shield

View the latest Global Infrastructure: http://aws.amazon.com/about-aws/global-infrastructure





# **AWS Management Console Demonstration**





## Learn from AWS experts. Advance your skills and knowledge. Build your future in the AWS Cloud.



Digital Training
Free, self-paced online
courses built by AWS
experts



Classroom Training
Classes taught by
accredited AWS instructors



AWS Certification

Exams to validate
expertise with an industryrecognized credential

Ready to begin building your cloud skills? Get started at: <a href="https://www.aws.training/">https://www.aws.training/</a>





## Thank You for Attending AWSome Day Online Conference

We hope you found it interesting! A kind reminder to complete the survey.

Let us know what you thought of today's event and how we can improve
the event experience for you in the future.

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