



Introduction

History

- AWS started In 2006
- Offering IT infrastructure services to businesses as web services—now commonly known as cloud computing.
- Today, AWS serve 245 countries
- AWS is the leader on cloud infrastructure

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



Source: Gartner (July 2019)

Leaftaps Application

2010, We hosted locally on a server for classroom:

- Speed
- Performance
- Security
- Cost
- Maintenance
- Load Balancer
- Electricity

24 Launched Regions

Each with multiple Availability Zones
(AZ's)

3 Announced Regions

76 Availability Zones

1 Local Zone

For ultralow latency applications

2x More Regions

With multiple AZ's than the next
largest cloud provider

245 Countries and Territories Served

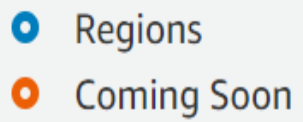
97 Direct Connect Locations

216 Points of Presence

205 Edge Locations and 11 Regional
Edge Caches



amazon





Compute

EC2
Lightsail [↗](#)
ECR
ECS
EKS
Lambda
Batch
Elastic Beanstalk
Serverless Application Repository
AWS Outposts
EC2 Image Builder



Storage

S3
EFS
FSx
S3 Glacier
Storage Gateway
AWS Backup



Database

RDS
DynamoDB
ElastiCache
Neptune
Amazon Redshift
Amazon QLDB
Amazon DocumentDB



Customer Enablement

AWS IQ [↗](#)
Support
Managed Services



Blockchain

Amazon Managed Blockchain



Satellite

Ground Station



Quantum Technologies

Amazon Braket [↗](#)



Management & Governance

AWS Organizations
CloudWatch
AWS Auto Scaling
CloudFormation
CloudTrail
Config
OpsWorks
Service Catalog
Systems Manager
AWS AppConfig
Trusted Advisor
Control Tower
AWS License Manager



Machine Learning

Amazon SageMaker
Amazon CodeGuru
Amazon Comprehend
Amazon Forecast
Amazon Fraud Detector
Amazon Kendra
Amazon Lex
Amazon Machine Learning
Amazon Personalize
Amazon Polly
Amazon Rekognition
Amazon Textract
Amazon Transcribe
Amazon Translate
AWS DeepLens
AWS DeepRacer
Amazon Augmented AI



Analytics

Athena
EMR
CloudSearch
Elasticsearch Service
Kinesis
QuickSight [↗](#)
Data Pipeline
AWS Data Exchange
AWS Glue
AWS Lake Formation



Application Integration

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



AWS Cost Management

AWS Cost Explorer
AWS Budgets
AWS Marketplace Subscriptions



Customer Engagement

Amazon Connect
Pinpoint
Simple Email Service



Business Applications

Alexa for Business
Amazon Chime [↗](#)
WorkMail



End User Computing

WorkSpaces
AppStream 2.0
WorkDocs
WorkLink

AWS Service Quotas

AZ	Regional	Global
EC2 Instance	S3 Bucket	IAM(Users, Groups, Roles & Policies)
EBS Volume	AMI	Route 53
RDS Instance	Snapshots(EBS/RDS)	CloudFront Distribution
Redshift Node	DynamoDB	
Subnets	VPC	
Elastic File System	Elastic IP	
	SQS, SNS	
	CloudWatch Metrics	

Simplifying Mobile Testing with AWS Device Farm



Automated tests
on real devices



Android and
Fire OS



Configure app
and device settings



Detailed reports and
searchable logs

Features/ Cloud



AWS



Azure



Google Cloud



IBM Cloud

Service Name	EC2 Spot Instances	Low Priority VMs	Preemptible VMs	Transient Servers
Pricing	Variable	Fixed	Fixed	Fixed
Shutdown Lead Time	2 Mins	30 Secs	30 Secs	None
Maximum Time Limit	None (depends on extra capacity)	None (depends on extra capacity)	24 Hour Limit and certain instances within 6 hours	None (depends on extra capacity)
Capacity Management	Spot Fleet	No	Instance Groups	No
Cost Visibility	Spot Instance Advisor	Fixed Pricing	Fixed Pricing	Fixed Pricing