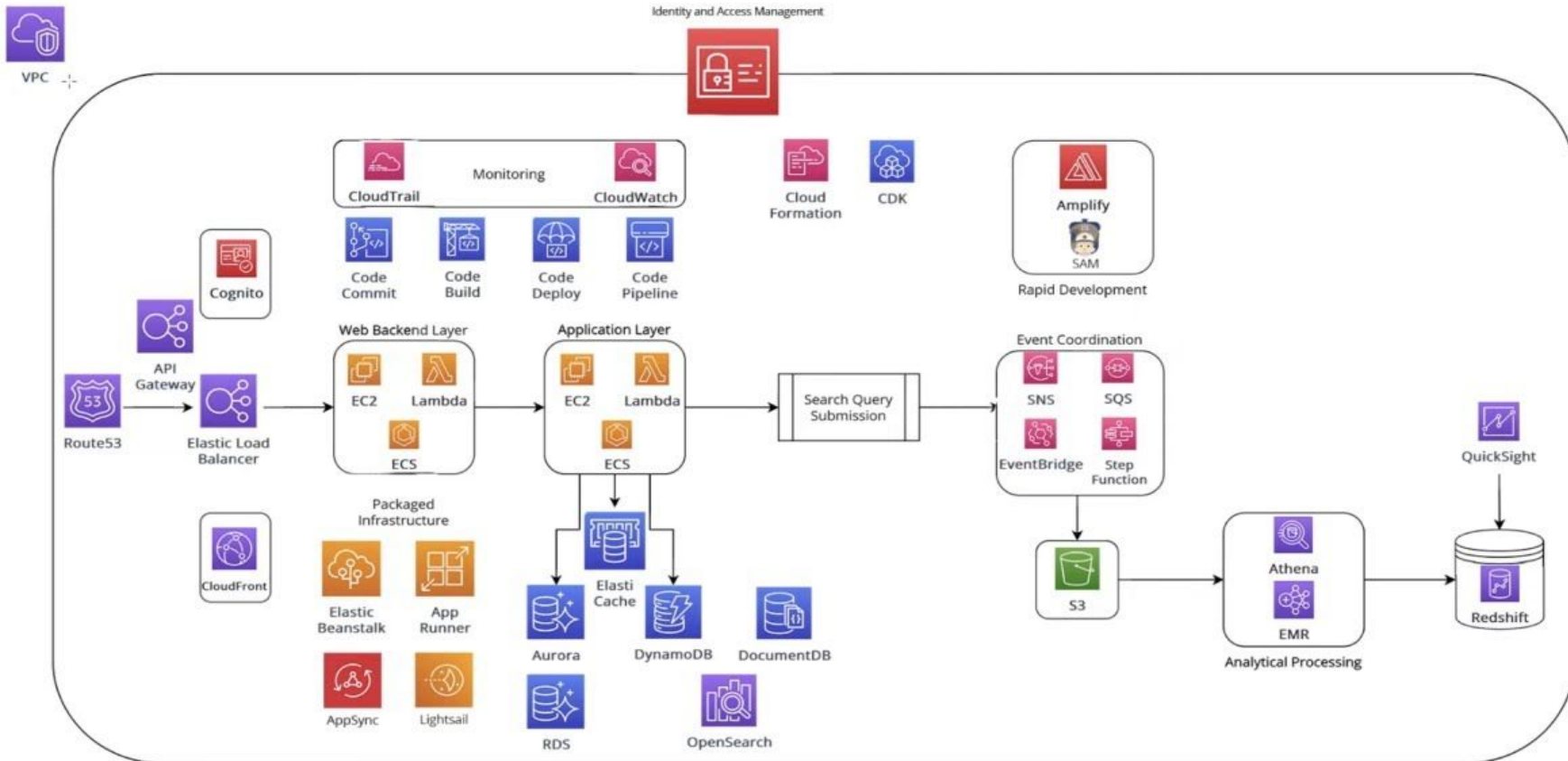


# FREE FRESHERS AND EXPERIENCED DEVOPS/SRE JOB READY COURSE

- ❖ DAY 7 - AWS
- ❖ RECORDED VIDEOS ON YOUTUBE  
WEEK BY WEEK PROJECTS AND VIDEOS
- ❖ WEEK 1 COMPLETED PLAYLIST -  
<https://www.youtube.com/playlist?list=PLj-3PZIPbUVSmzgra20gyK6GNiZKY2X43>
- ❖ YOUTUBE - <https://www.youtube.com/praveensingampalli>
- ❖ TELEGRAM - <https://t.me/DevOpsSREbootcamp3>
- ❖ INSTAGRAM – <https://www.instagram.com/singam4devops/>
- ❖ WEBSITE - [www.praveensingampalli.com](http://www.praveensingampalli.com)



# AWS Services Overview



# AMAZON WEB SERVICES

Amazon Web Services (AWS) started to offer IT services to the market in the form of web services, which is nowadays known as cloud computing.

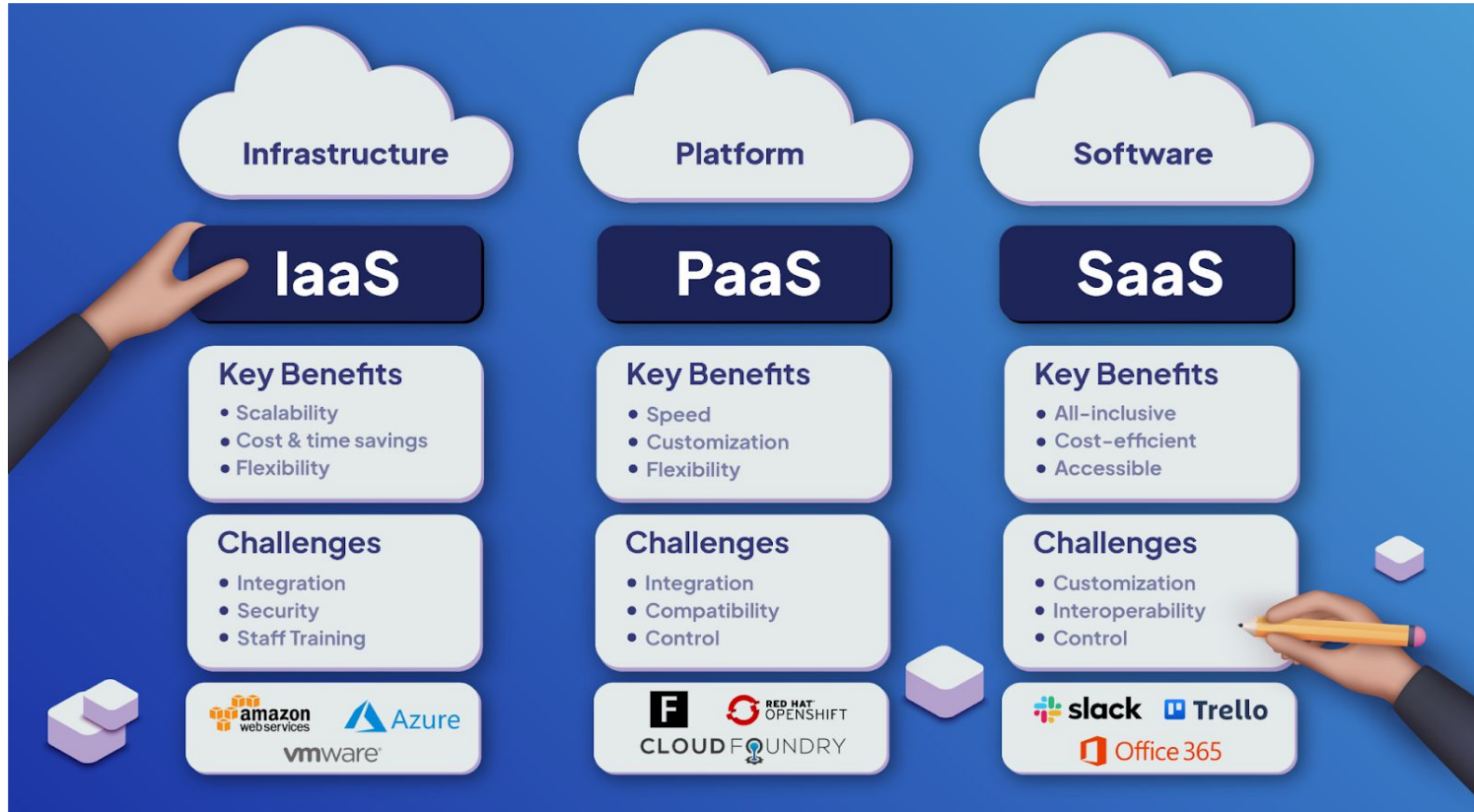
we **need not plan for servers and other IT infrastructure** which takes up much of time in advance.

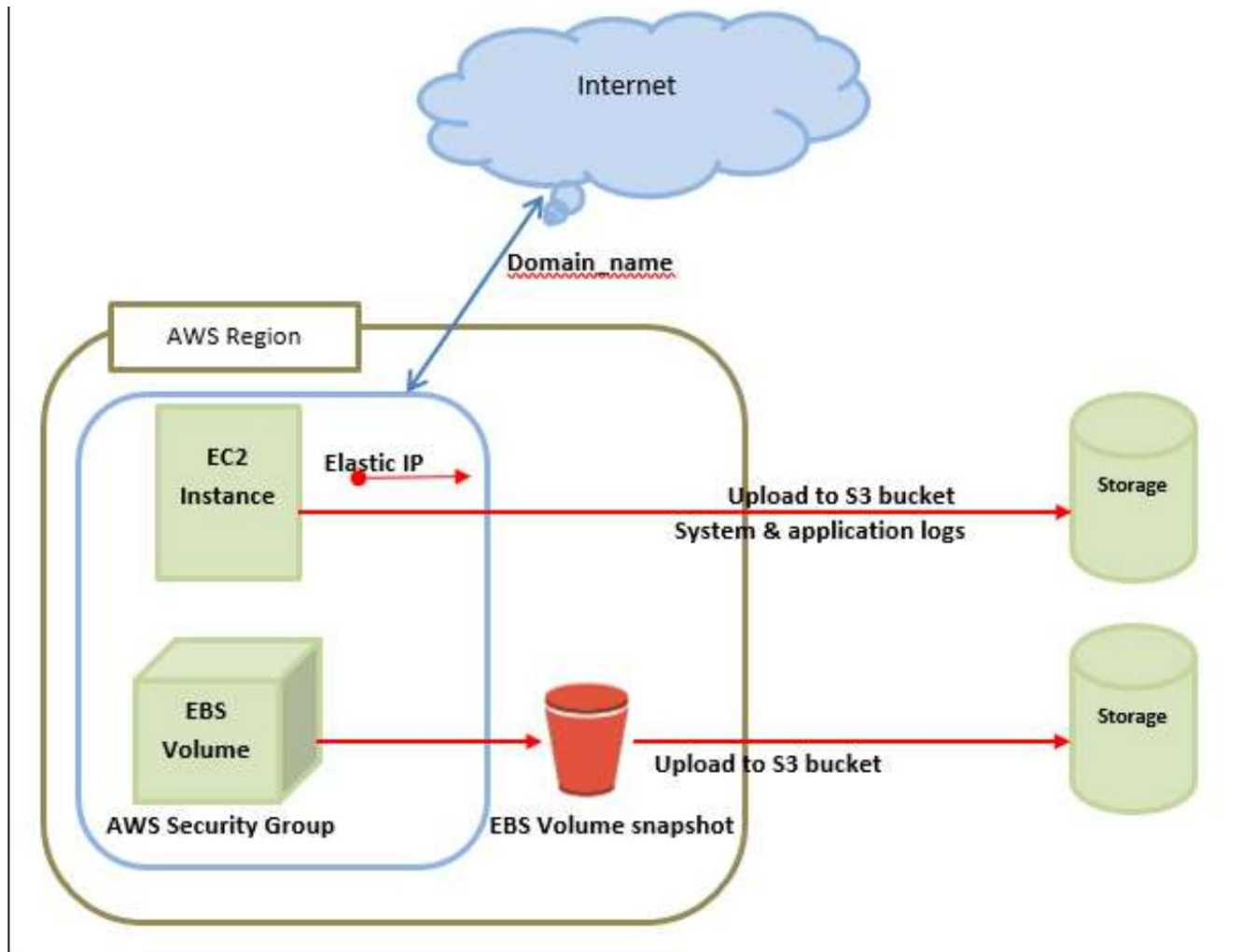
**services can instantly spin up hundreds or thousands of servers** in minutes and deliver results faster.


We pay **only for what we use** with no up-front expenses and no long-term commitments, which makes AWS cost efficient.

**Cloud computing** is an internet-based computing service in which large groups of remote servers are networked to allow centralized data storage, and online access to computer services or resources.

# cloud service models





	Type	Description	Mnemonic
General Purpose	a1	Good for scale-out workloads, supported by Arm	<b>a</b> is for Arm processor – or as light as <b>A1</b> steak sauce
	t-family: t3, t3a, t2	Burstable, good for changing workloads	<b>t</b> is for <b>tiny</b> or <b>turbo</b>
	m-family: m6g, m5, m5a, m5n, m4	Balanced, good for consistent workloads	<b>m</b> is for <b>main</b> or happy <b>medium</b>
Compute Optimized	c-family: c5, c5n, c4	High ratio of compute to memory	<b>c</b> is for <b>compute</b>
Memory Optimized	r-family: r5, r5a, r5n, r4	Good for in-memory databases	<b>r</b> is for <b>RAM</b>
	x1-family: x1e, x1	Good for full in-memory applications	<b>x</b> is for <b>xtreme</b>
	High memory	Good for large in-memory databases	High memory is for... high memory.
	z1d	Both high compute and high memory	<b>z</b> is for <b>zippy</b>
Accelerated Computing	p-family: p3, p2	Good for graphics processing and other GPU uses	<b>p</b> is for <b>pictures</b>
	Inf1	Support machine learning inference applications	<b>Inf</b> is for <b>inference</b>
	g-family: g4, g3	Accelerate machine learning inference and graphics-intensive workloads	<b>g</b> is for <b>graphics</b>
	f1	Customizable hardware acceleration with field programmable gate arrays (FPGAs)	<b>f</b> is for <b>FPGA</b> or <b>feel</b> as in hardware
Storage Optimized	i-family: i3, i3en	SDD-backed, balance of compute and memory	<b>i</b> is for <b>IOPS</b>
	d2	Highest disk ratio	<b>d</b> is for <b>dense</b>
	h1	HDD-backed, balance of compute and memory	<b>H</b> is for <b>HDD</b>





# EBS - Volume Type Usage

	Solid State Drives (SSD)		Hard Disk Drives (HDD)		
<b>Volume Type</b>	General Purpose	Provisioned IOPS SSD	Throughput Optimized HDD	Cold HDD	EBS Magnetic
<b>API Names</b>	<b>gp2</b>	<b>io1</b>	<b>st1</b>	<b>sc1</b>	<b>standard</b>
<b>Description</b>	Balances price and performance	Highest SSD performance for Mission-critical low latency or high throughput	Low-cost. Designed for frequently accessed, throughput intensive workloads	Lowest HDD cost. Less frequently used workloads	
<b>Use Cases</b>	Most Workloads	Large Databases IOPS greater than 16,000 or Throughput greater than 250 MiB	Data Warehouses Big Data Log Processing	File Storage	Archival Storage
<b>Volume Size</b>	1GiB - 16TiB	4GB - 16 TiB	500GiB - 15TiB	500GiB - 15TiB	500GiB - 15TiB
<b>Max IOPS</b>	16,000	64,000	500	250	40-200

- 1. General Purpose (SSD)** (gp2) for general usage without specific requirements
- 2. Provisioned IOPS (SSD)** (io1) when you require really fast input & output
- 3. Throughput Optimized HDD** (st1) magnetic drive optimised for quick throughput
- 4. Cold HDD** (sc1) Lowest cost HDD volume for infrequently access workloads
- 5. EBS Magnetic** (standard) previous generation HDD

## Compute

### Amazon Elastic Compute Cloud (Amazon EC2)



### Amazon Elastic MapReduce



## Content Delivery

### Amazon CloudFront



## Monitoring

### Amazon CloudWatch



## Storage

### Amazon Simple Storage Service (Amazon S3)



### AWS Import/Export



### AWS Storage Gateway Service



### Amazon Elastic Block Storage (Amazon EBS)



## Non-Service Specific



## Networking

### Amazon Elastic Load Balancing



### AWS Direct Connect



### Amazon Route 53



Route Table

### Amazon Virtual Private Cloud (Amazon VPC)



## On-Demand Workforce

### Amazon Mechanical Turk



## Database

### Amazon SimpleDB



### Amazon Relational Database Service (Amazon RDS)



### Amazon DynamoDB



### Amazon ElastiCache

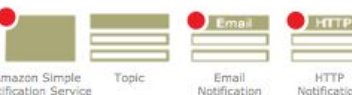


## Messaging

### Amazon Simple Email Service (Amazon SES)



### Amazon Simple Notification Service (Amazon SNS)



### Amazon Simple Queue Service (Amazon SQS)

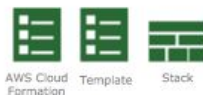


### Amazon Simple Workflow Service (Amazon SWF)



## Deployment and Management

### AWS CloudFormation



### AWS Elastic Beanstalk



## Groups

