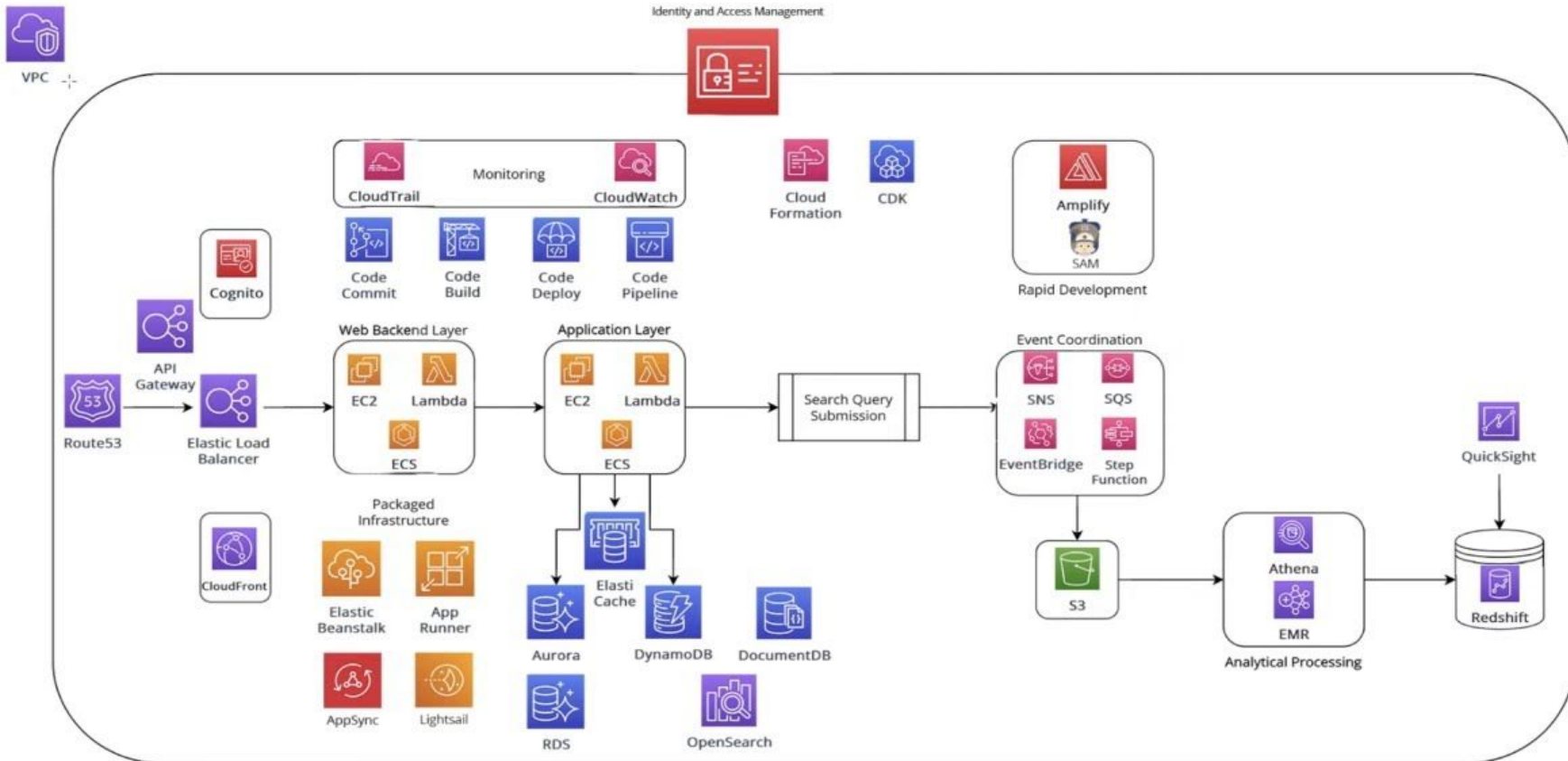


FREE FRESHERS AND EXPERIENCED DEVOPS/SRE JOB READY COURSE

- ❖ 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



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.

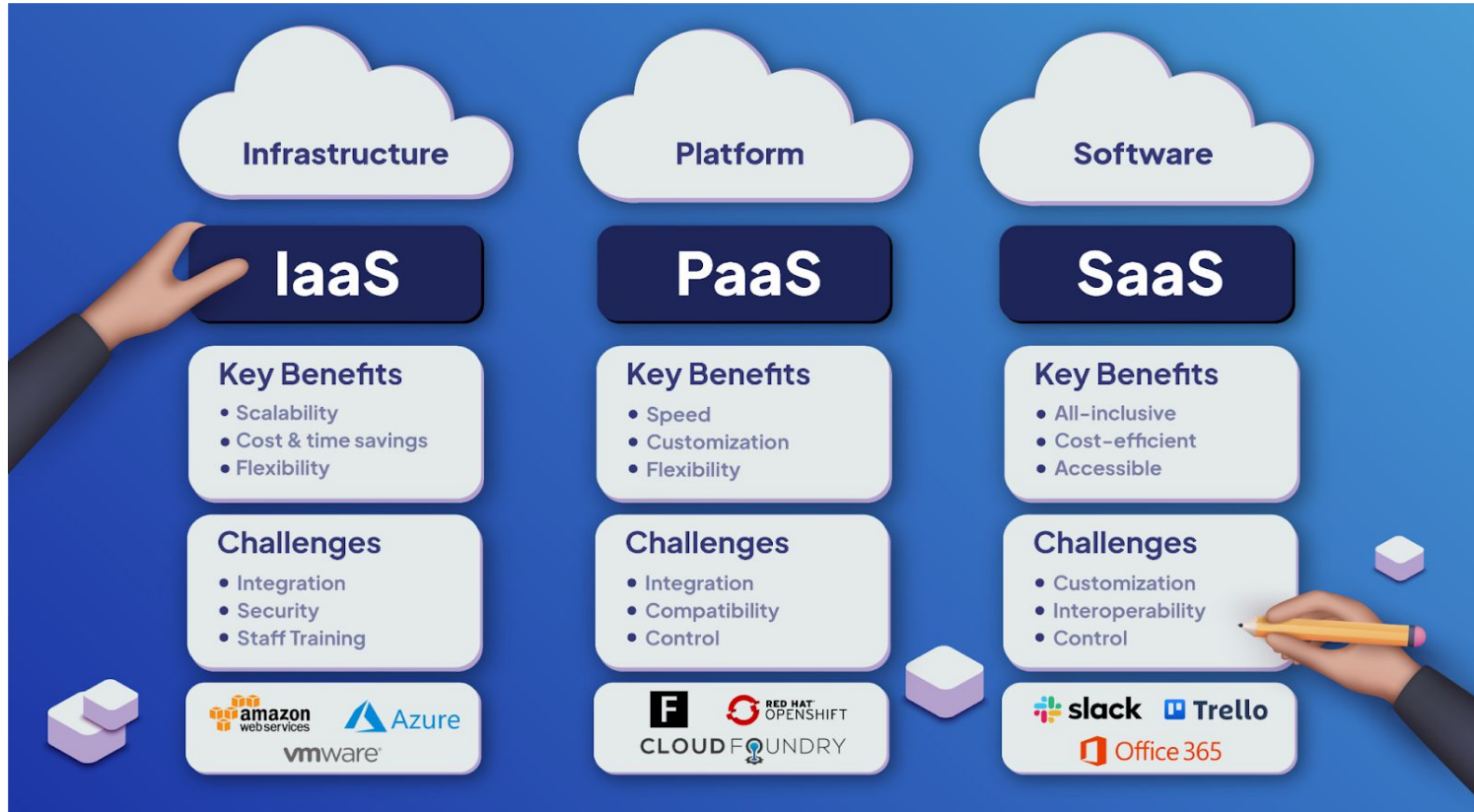
we **need not plan for servers and other IT infrastructure** which takes up much of time in advance.

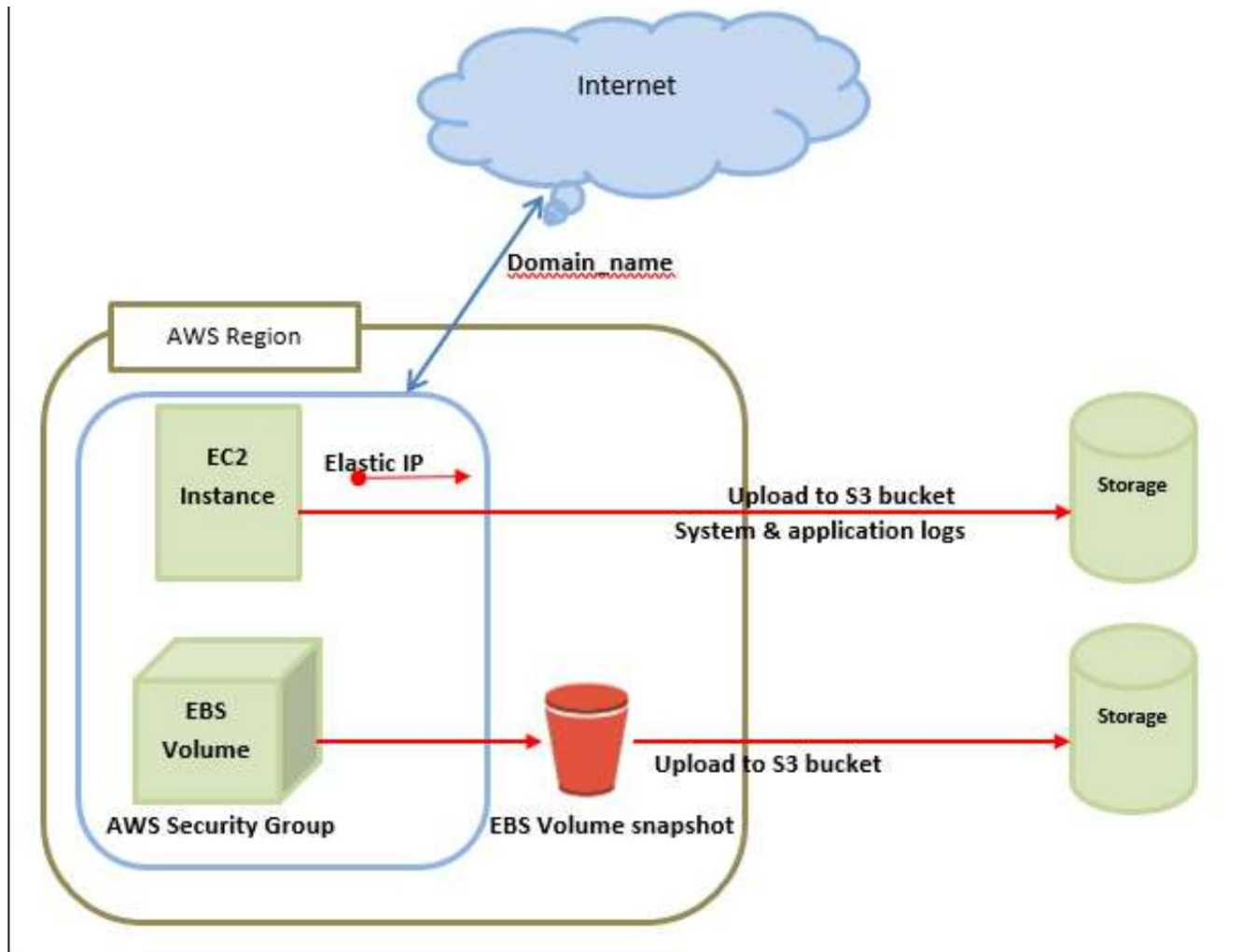
services can instantly spin up hundreds or thousands of servers in minutes and deliver results faster.


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



EBS - Volume Type Usage

	Solid State Drives (SSD)		Hard Disk Drives (HDD)		
Volume Type	General Purpose	Provisioned IOPS SSD	Throughput Optimized HDD	Cold HDD	EBS Magnetic
API Names	gp2	io1	st1	sc1	standard
Description	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	
Use Cases	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
Volume Size	1GiB - 16TiB	4GB - 16 TiB	500GiB - 15TiB	500GiB - 15TiB	500GiB - 15TiB
Max IOPS	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

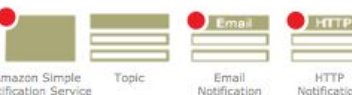


Messaging

Amazon Simple Email Service (Amazon SES)



Amazon Simple Notification Service (Amazon SNS)



Amazon Simple Queue Service (Amazon SQS)

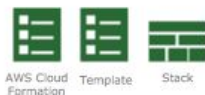


Amazon Simple Workflow Service (Amazon SWF)



Deployment and Management

AWS CloudFormation



AWS Elastic Beanstalk



Groups

