(5)

* Amazon elastic cache → used for search purpose
* Amazon Snowball → To transfer large amounts of data into and out of AWS cloud
* Amazon Glacier → It is secure, durable & low-cost storage class for data archiving.
* Amazon Redshift → collapse, style and not change data constantly.
* Amazon S3 → provides 99.999999% reliability and durability
* Amazon Aurora → It automatically scales property databases for loads
* Config → It enabled users to dynamically adjust CPU & RAM resources

→ NAT = Network Address Translation
(private networks & public change (translate) before sharing information)

→ NACL = Optional security layer (controlling traffic in and out of a subnet and acts as a firewall)
Network ACL

→ Security group acts as a virtual firewall for Amazon EC2 instances to control the traffic (in and out)
It is similar to NACL

→ AWS TCO calculator = Used to explore AWS services based on your use cases and create a cost estimation
(total cost of ownership)

→ AWS Budget → Allows you to stay cost informed based on custom budget limits

→ AWS Cost explorer → monthly / daily costs manage
↑
to visualize, understand & manage

→ Amazon cloudwatch = monitoring & observability service built for developers and product owners to collect and metrics, set alarm & automatic reacti

→ Amazon Config = a service that enable you to audit, assess and evaluate configurations of the resources.

→ Amazon Athena = Interactive Query Service easy to analyze data in Amazon S3 using standard SQL

→ Amazon (S3) (Simple Storage Service)	Amazon (EBS) (Elastic block Store)
* Large amount of data is stored	* Blocks of data is stored
* Accessible Storage via internet	* Not Accessible via internet
* NO SQL is not used	* NO SQL database is used

→ Edge locations = where endusers access services located at AWS (US)

↓

This was mainly used by AWS cloudfront to distribute content to end users with low latency (time) and high speed.

→ Amazon EC2 ⇒ uses regions only

It is used to launch instances (virtual servers) whenever we need.

Amazon elastic compute cloud (EC2)

→ AWS storage gateway = hybrid cloud storage service that gives you on-premises (private) access to virtually unlimited cloud storage.

→ Amazon VPC (directly access through internet at any place)

→ Amazon EC2 benefits = to pay only for capacity which we use

(1) Global Reach → Feature of Aws cloud that will support international company's requirement for low latency to all of its customers

(2) Amazon RDS (Relational Database Service)

Amazon EFS (Elastic file system) → These Aws services used for read/write of and constantly changing data

(3) It simplifies relational database administration tasks → Advantage of Amazon RDS

(4) Amazon Aurora → A customer needs to run a MySQL database that easily scales.

(5) Availability Zone → Aws infrastructure consists of one & more discrete data centers interconnected through low latency links

(6) Awareness and Training → shared control between customer and Aws

⑦ 3 zones (three zones) → Availability zones should compute resources be provisioned across to achieve high availability

⑧ It allows the business to focus on business activities → one advantage to moving infrastructure from an on-premises data center to Aws cloud

⑨ Amazon S3 → lowest-cost, durable and storage option for retaining database backup for immediate retrieval

⑩ Amazon DynamoDB → Fast and reliable NOSQL database service

⑪ Decreased acquisition time for new compute resources → Agility → cloud

whenever u want more u get more
example in Aws
whenever u want less (when don't need more)

(12) Aws organizations → Aws service use to consolidate and centrally manage multiple Aws accounts

- Aws IAM → For authentication purpose
- Aws Schema Conversion Tool → For migration of data
- Aws Config → for updates (to assess, audit and evaluate configurations

(13) Using many instances in parallel (HPC) → Approach to transcoding a large number of individual video files adheres to Aws architecture principles

*By using "transcoding" we can easily handle with large number of files

(14) Physical security → For which auditing process does Aws have sole responsibility