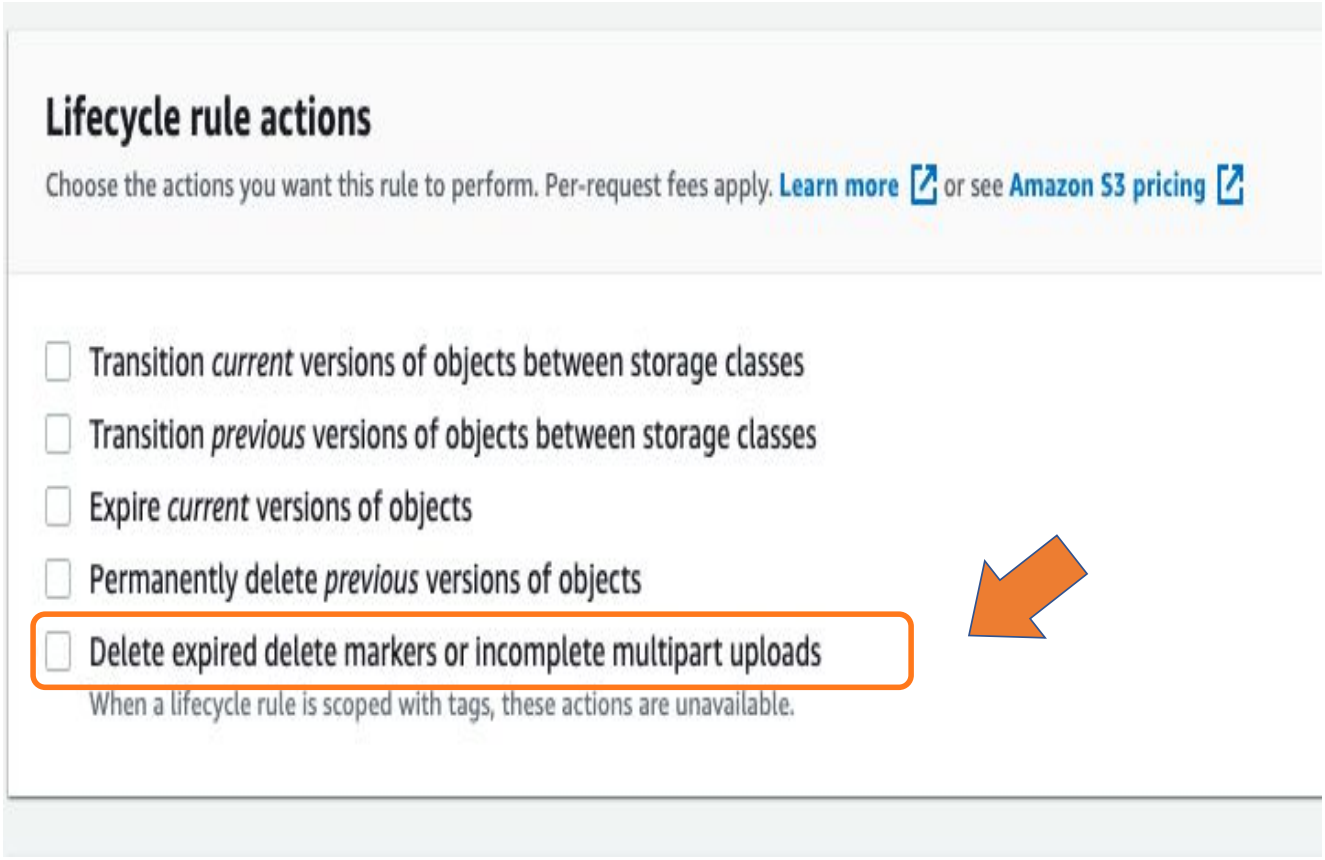
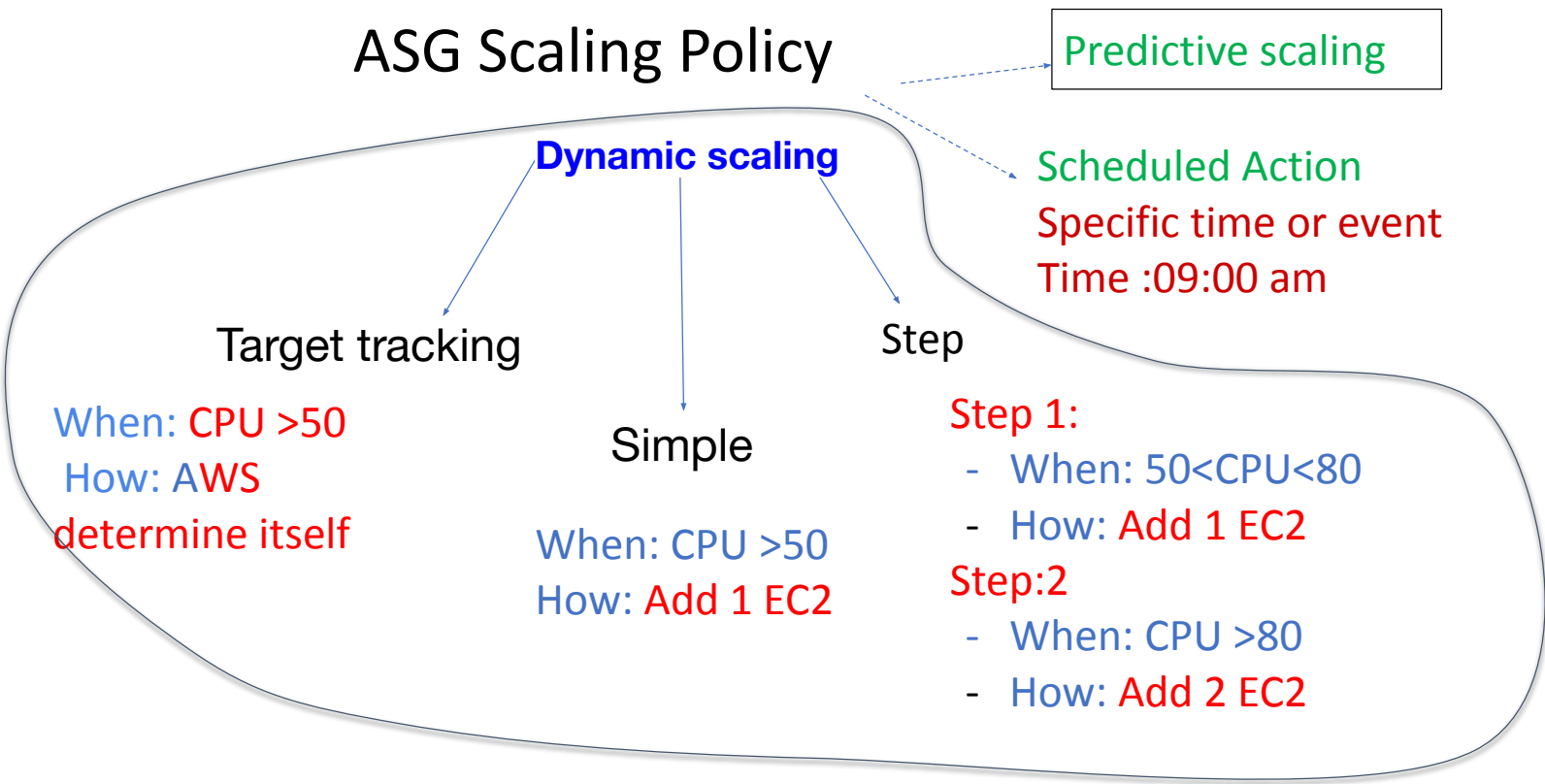
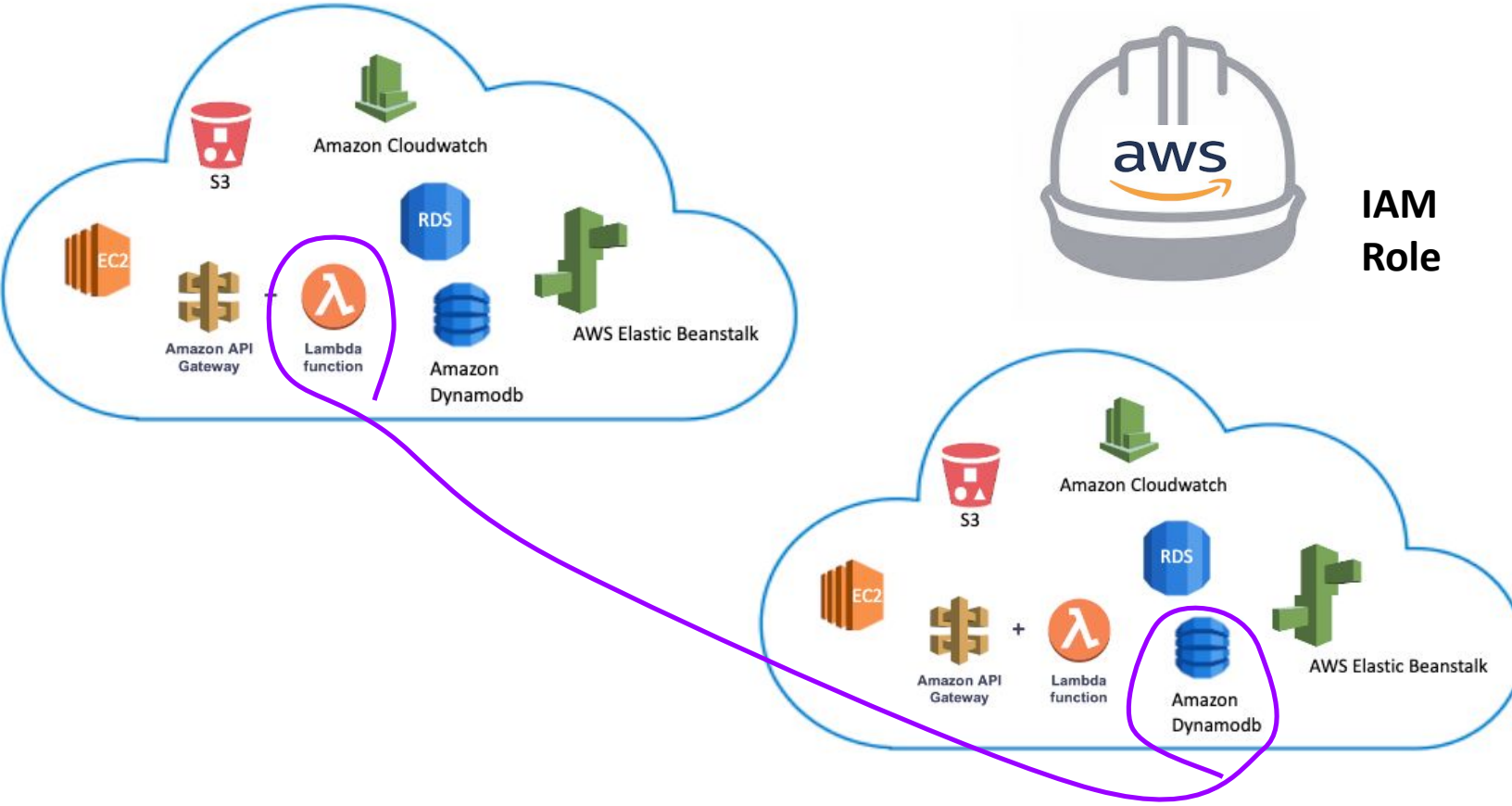
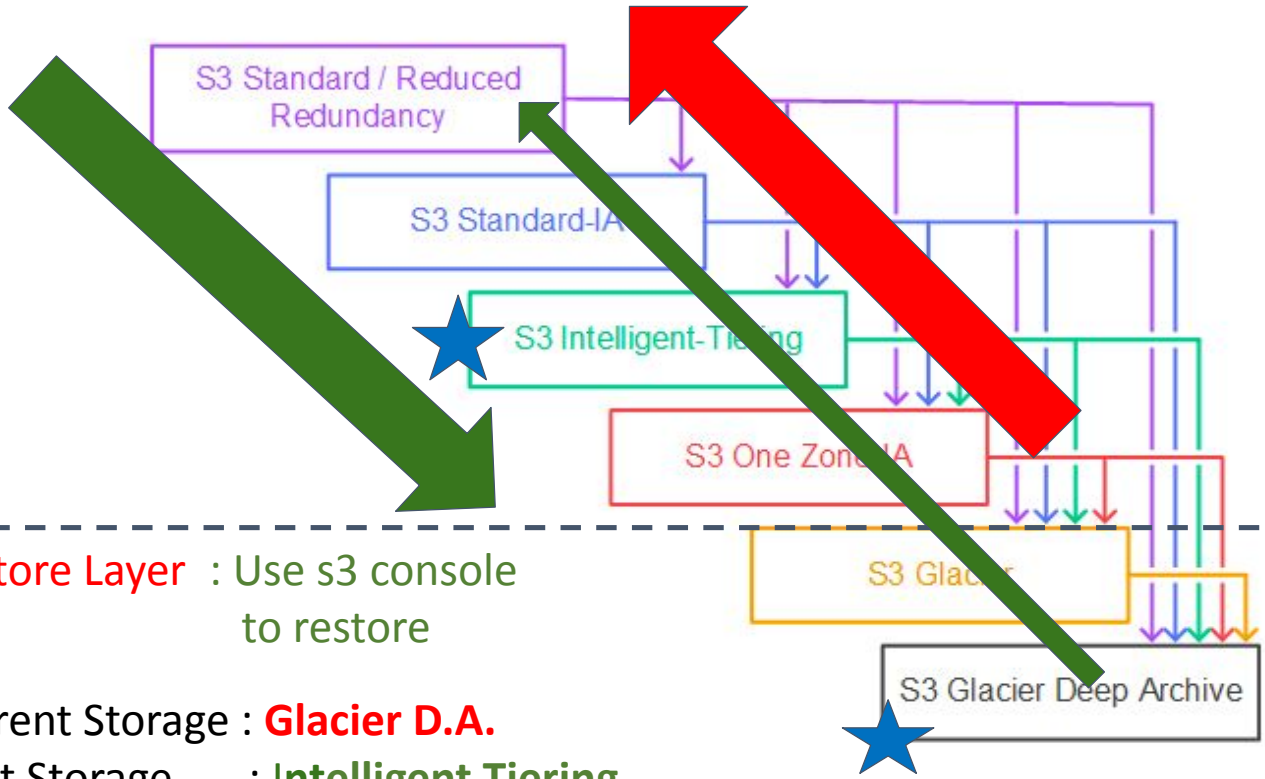

Lifecycle rule actions
Choose the actions you want this rule to perform. Per-request fees apply. Learn more or see Amazon S3 pricing
Transition current versions of objects between storage classes
Transition previous versions of objects between storage classes
Expire current versions of objects
Permanently delete previous versions of objects
Delete expired delete markers or incomplete multipart uploads
When a lifecycle rule is scoped with tags, these actions are unavailable.


ASG Scaling Policy
Predictive scaling
Dynamic scaling
Scheduled Action
Specific time or event
Time :09:00 am
Target tracking
When: CPU >50
How: AWS determine itself
Simple
When: CPU >50
How: Add 1 EC2
Step
Step 1:
- When: 50<CPU<80
- How: Add 1 EC2
Step:2
- When: CPU >80
- How: Add 2 EC2



S3 Lifecycle Configuration-AWS console or CLI



Restore Layer : Use s3 console to restore

Current Storage : **Glacier D.A.**

Next Storage : **Intelligent Tiering**

Amazon FSx file systems

Amazon FSx for NetApp ONTAP

Fully managed shared storage built on NetApp's popular ONTAP file system.

Amazon FSx for OpenZFS

Fully managed shared storage built on the popular OpenZFS file system.

Amazon FSx for Windows File Server

Fully managed shared storage built on Windows Server.

- Compatible with Windows Active Directory

Amazon FSx for Lustre

Fully managed shared storage built on the world's most popular high-performance file system.

- HPC
- Compatible with S3

- Compatible with FSx File Gateway

- For Linux Instance
- Can't write/read S3

Cost Savings Plan

1 year/1000 dollars/limit

Compute
Saving Plans

EC2
Fargate
Lambda

%66 Cost Saving

EC2 Instance
Saving Plans

EC2

%72 Cost Saving

Reserved Instances

1 year/1500 dollars/limitless

Convertible
RI (Reserved Instance)

EC2

%66 Cost Saving

Standart
RI (Reserved Instance)

EC2

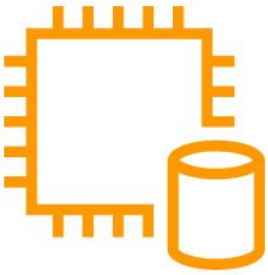
%72 Cost Saving

convertible to the other size of instance

You are building an automated transcription service where Amazon EC2 worker instances process an uploaded audio file and generate a text file. You must store both of these files in the same durable storage until the text file is retrieved. Customers fetch the text files frequently. You do not know about the storage capacity requirements. Which storage option would be both cost-efficient and highly available in this situation?

Amazon EBS

Amazon Glacier



Instance Store

Network ACL: acl-02fec58ef42e8e6e9

Default NACL

Details | **Inbound Rules** | Outbound Rules | Subnet associations | Tags

Edit inbound rules

View All rules

Rule #	Type	Protocol	Port Range	Source	Allow / Deny
100	ALL Traffic	ALL	ALL	0.0.0.0/0	ALLOW
*	ALL Traffic	ALL	ALL	0.0.0.0/0	DENY

Edit outbound rules

View All rules

Rule #	Type	Protocol	Port Range	Destination	Allow / Deny
100	ALL Traffic	ALL	ALL	0.0.0.0/0	ALLOW
*	ALL Traffic	ALL	ALL	0.0.0.0/0	DENY

What will be migrated ?

Which Service wiil be used ?

On-Premises

DATA → DataSync

DATABASE → Database Migration Service

VM SERVER → Server Migration Service

VM Import/Export

Track the process of the migration (All kind)

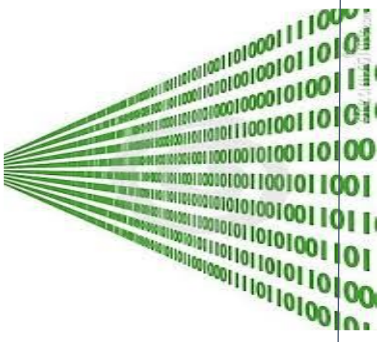
Migration Hub

Real time Streaming

Capture

Transfer/Load

Analyze



Kinesis Video Stream

Kinesis Streams

Kinesis Data Stream

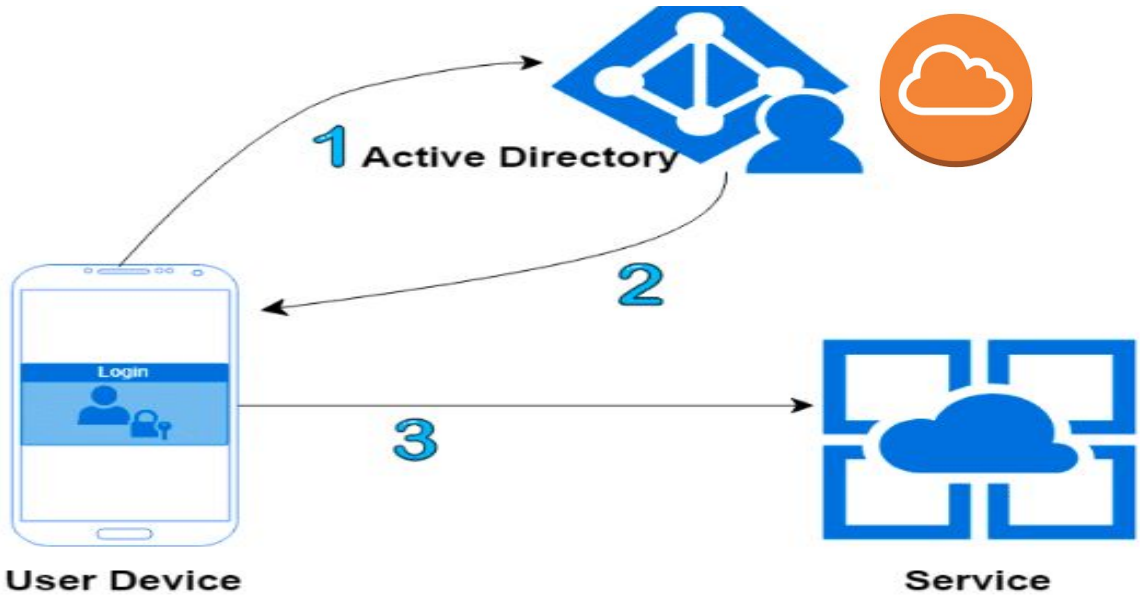
Kinesis Firehose

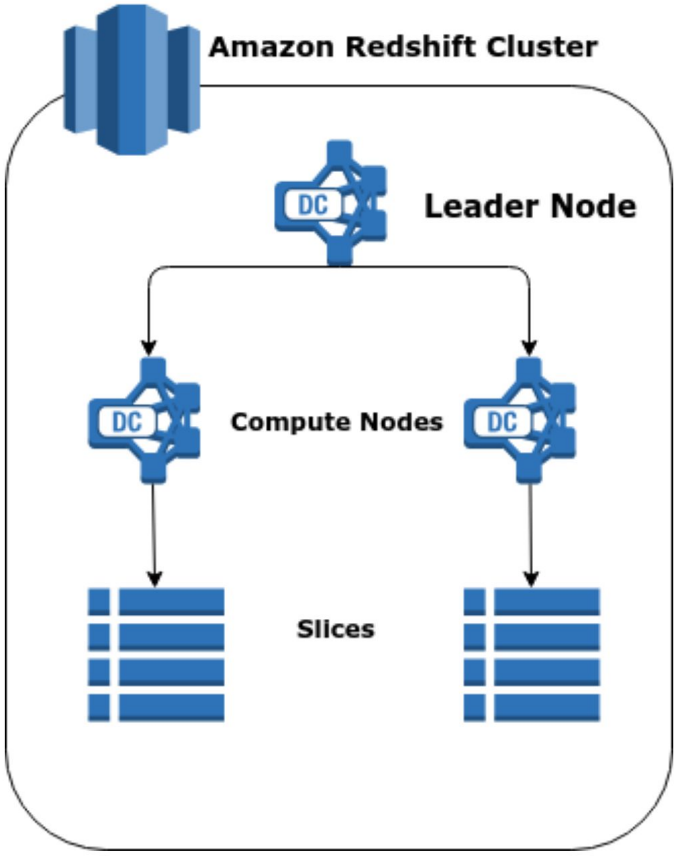
Load streaming data into Amazon S3, Amazon Redshift, and Amazon Elasticsearch Service

Kinesis Analytics

Analyze data streams using standard SQL queries

Your company authenticates users in a very disconnected network requiring each user to have several username/password combinations for different applications. You have been assigned a task of consolidating and migrating services to the cloud and reducing the number of usernames and passwords, employees need to use. What would you recommend?





Reserved Instance

Reserved Instance

What will be migrated ?

Which Service wiil be used ?

On-Premises

DATA → DataSync

DATABASE → Database Migration Service

VM SERVER → Server Migration Service

Physical data transfer device

Snowball

Migration Hub

Linux operating system
Contains rules that block request patterns associated with exploitation of vulnerabilities specific to Linux, including LFI attacks. This can help prevent attacks that expose file contents or execute code for which the attacker should not have had access

200 — Add to web ACL

PHP application
Contains rules that block request patterns associated with exploiting vulnerabilities specific to the use of the PHP, including injection of unsafe PHP functions. This can help prevent exploits that allow an attacker to remotely execute code or commands.

100 — Add to web ACL

POSIX operating system
Contains rules that block request patterns associated with exploiting vulnerabilities specific to POSIX/POSIX-like OS, including LFI attacks. This can help prevent attacks that expose file contents or execute code for which access should not been allowed.

100 — Add to web ACL

SQL database
Contains rules that allow you to block request patterns associated with exploitation of SQL databases, like SQL injection attacks. This can help prevent remote injection of unauthorized queries.

200 — Add to web ACL

Windows operating system
Contains rules that block request patterns associated with exploiting vulnerabilities specific to Windows, (e.g., PowerShell commands). This can help prevent exploits that allow attacker to run unauthorized commands or execute malicious code.

200 — Add to web ACL

WordPress application
The WordPress Applications group contains rules that block request patterns

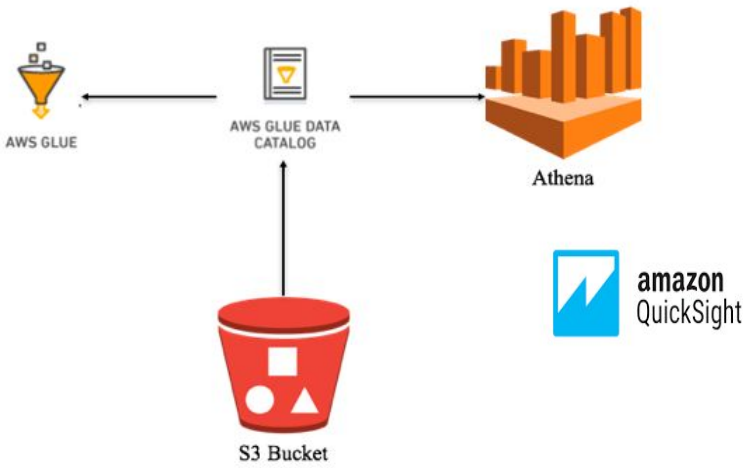
100 — Add to web ACL

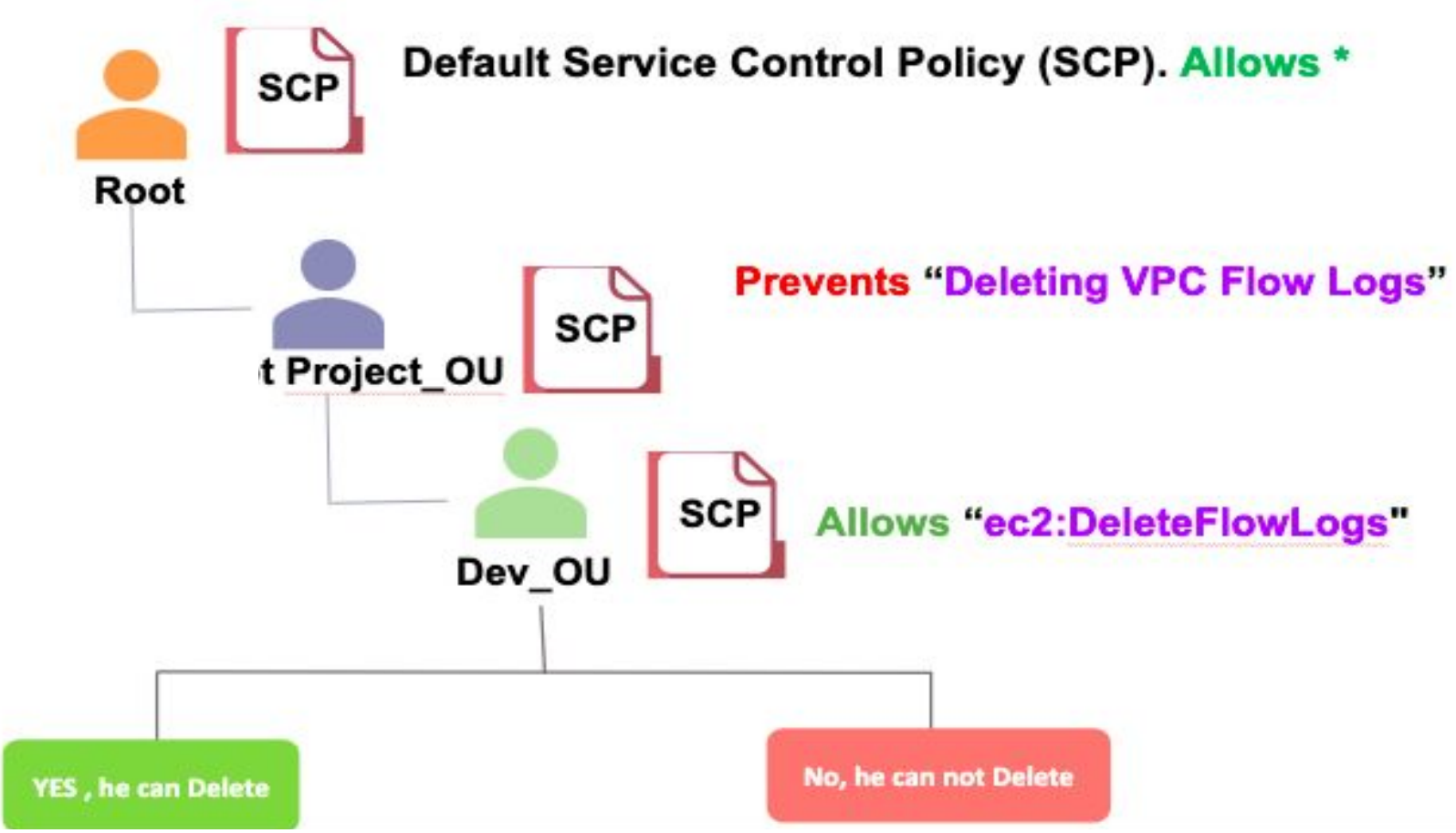
Verileri anlık internetten çekmek için

Verileri görselleştirmek için

Serverless -verileri sorgulamak için (S3)

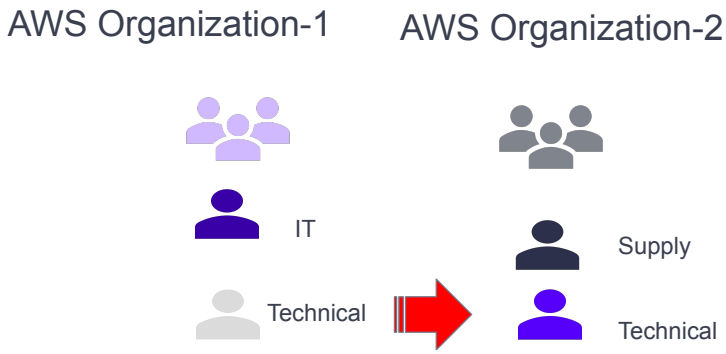
Verileri ayıklamak, dönüştürmek ve yüklemek amacıyla geliştirilmiş

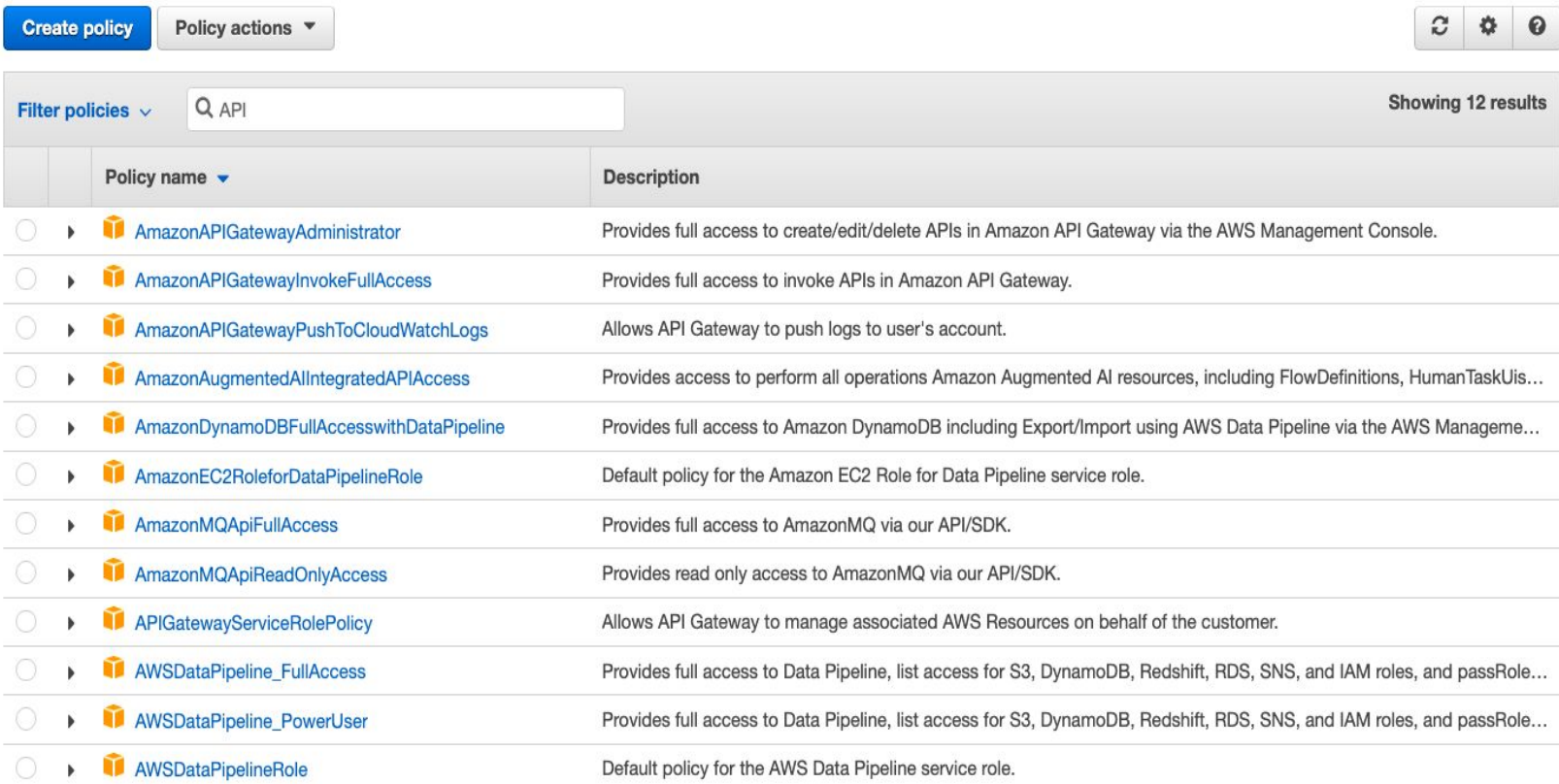




MEMBER AND MASTER ACCOUNT LEAVING PROCESS

1. Remove the **member account** from the old Organization.
2. Send an invite to the member account from the new Organization.
3. Accept the invite to the new Organization from the member account.
4. Delete the old Organization.
5. Send an invite to the master account
6. Accept the invite to the new Organization from the master account





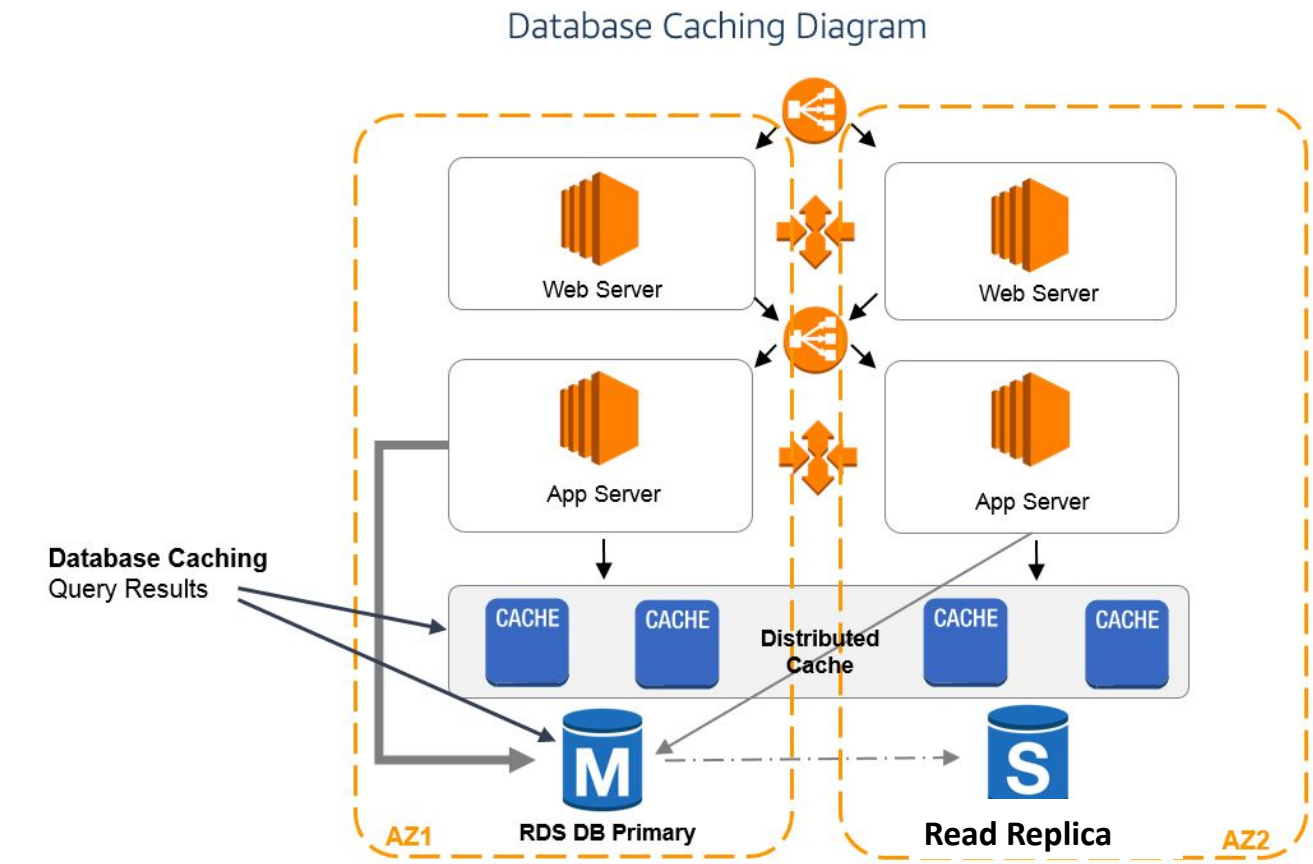
Which type of record?

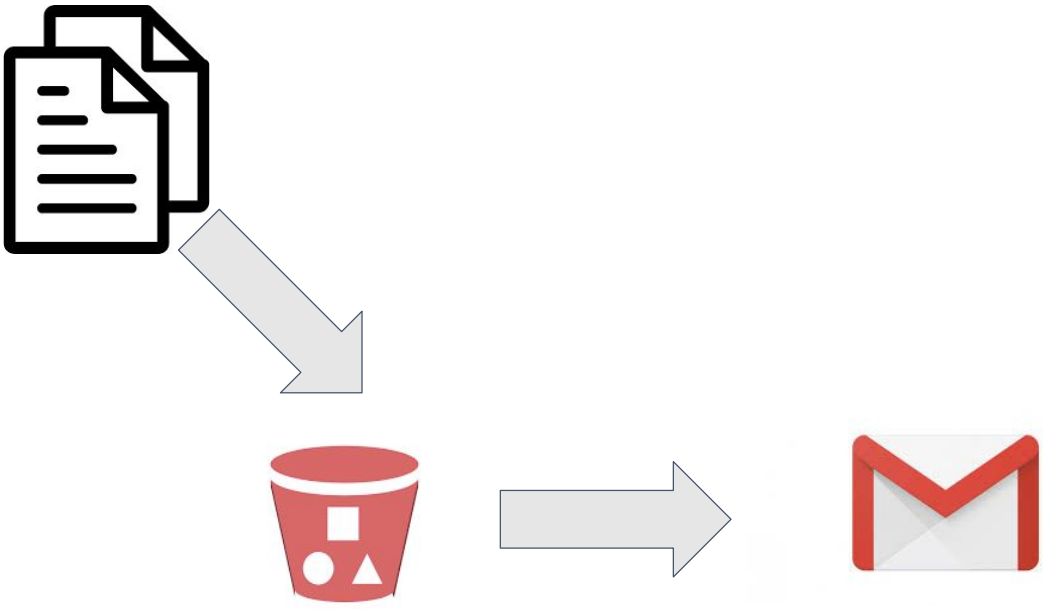
Create Domain Variations via Sub Domains	Mapping Value	Value Type	Record Type
www.clarusway.us	 Point out	IP of Server 1.2.3.4.5 Another Domain www.xxxxx.com AWS End point S3 Bucket url Load Balancer DNS CloudFront Etc..	A AAA CNAME Alias MX

Record Value type determines the record type

There is an urgent requirement to monitor some database metrics for a database hosted on AWS and send notifications. Which AWS services can accomplish this? (Select Two)

- A. Amazon Simple Email Service
- B. Amazon CloudWatch
- C. Amazon Simple Queue Service
- D. Amazon Route 53
- E. Amazon Simple Notification Service


Database Caching Diagram
Web Server
Web Server
App Server
App Server
Database Caching
Query Results
CACHE
CACHE
Distributed
Cache
CACHE
CACHE
M
S
AZ1
RDS DB Primary
Read Replica
AZ2



AWS Organization

Consolidated billing $ — $ SCP — All future

Account A separately : **8TB usage = 8 $**

Account B separately : **4 TB usage = 4 $**

+----------

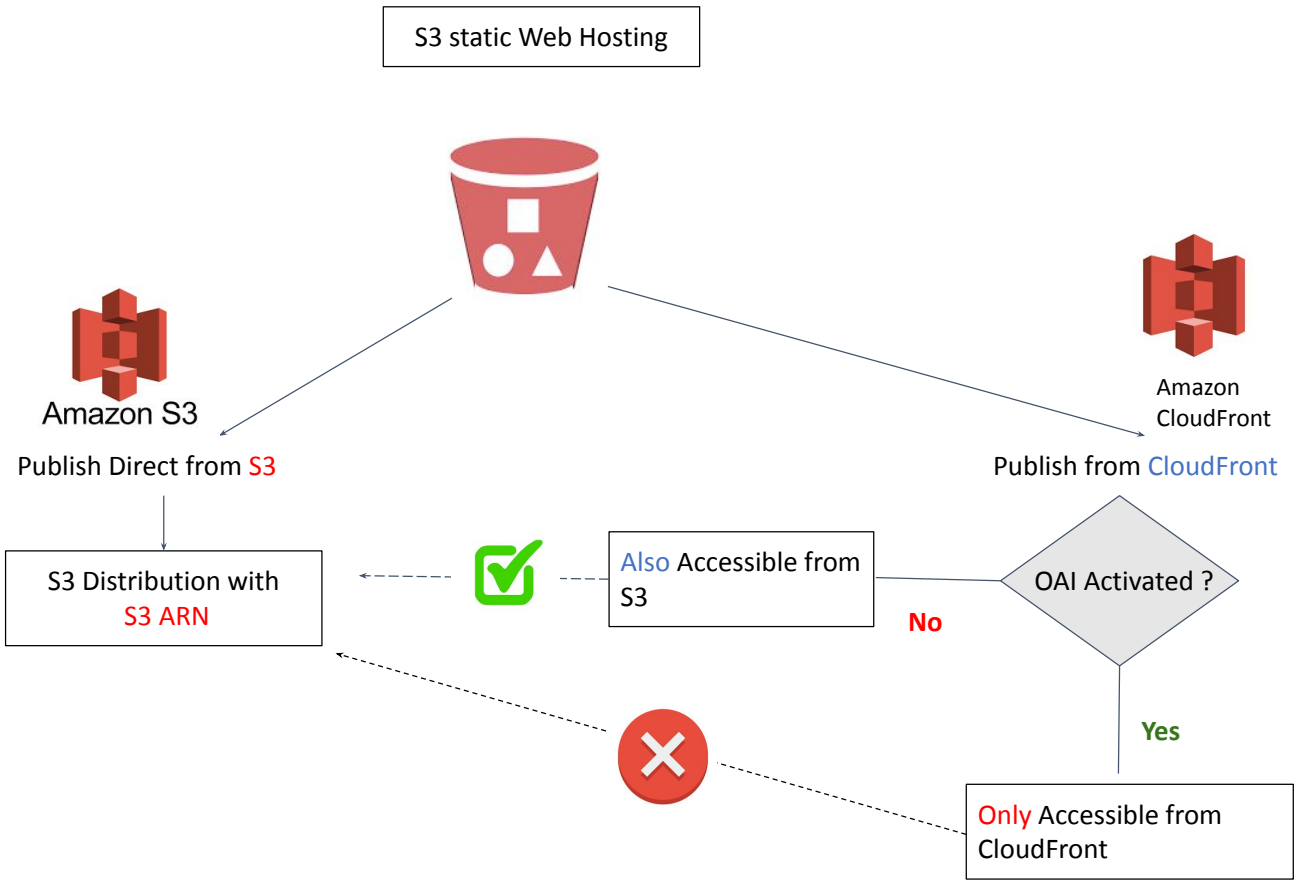
12 $

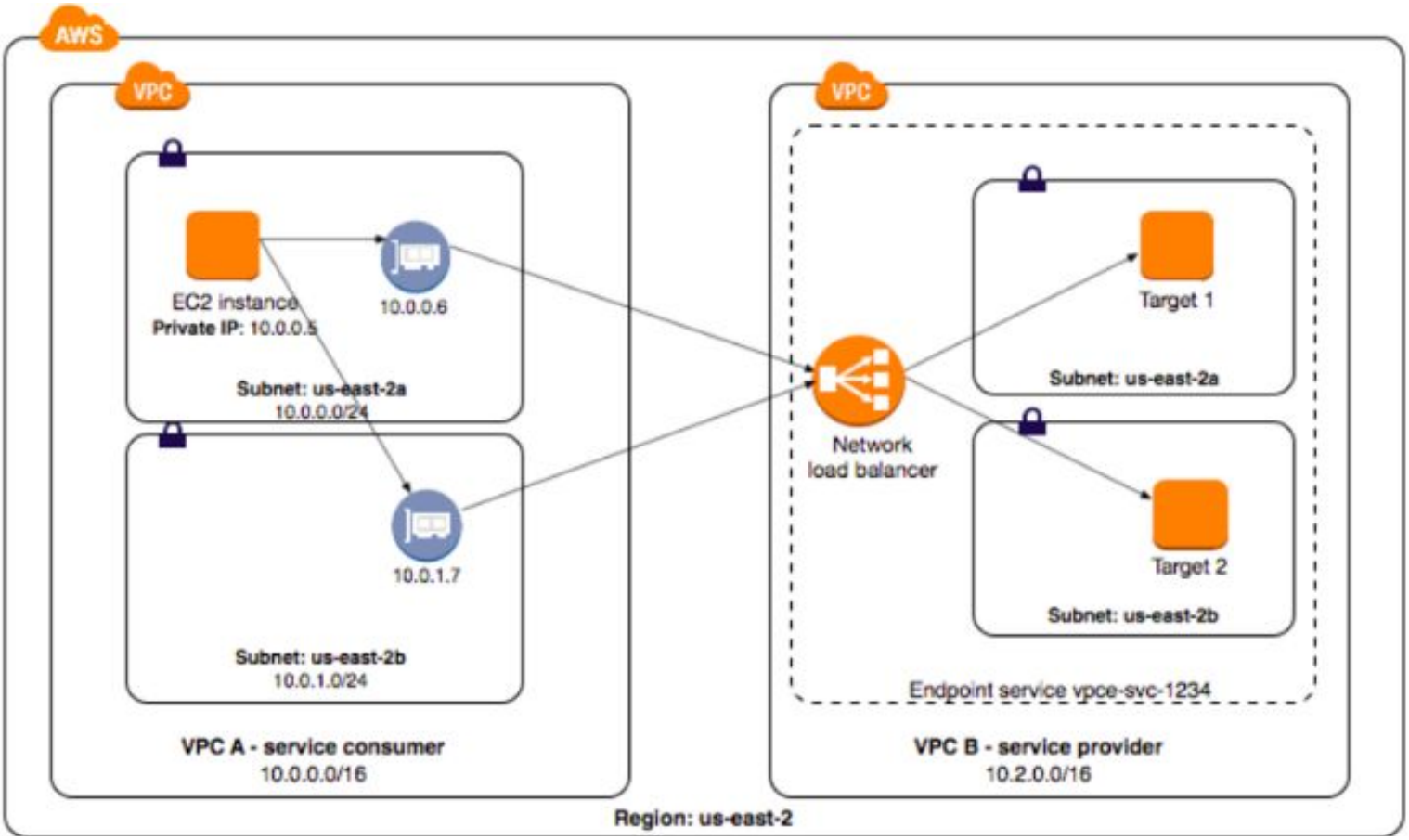
0 — *pay $1 for each TB in the first 10 TB* — 10 TB — *pay $0.5 for TB after 10 TB*

Consolidated billing : 10 TB x 1 $= 10 $ for the first 10 TB
2TB X 0.5 = 1 $ for the next 2 TB

+----------

11 $





Services

- AWS App Mesh
- Amazon Aurora
- AWS Certificate Manager Private Certificate Authority
- AWS CodeBuild
- Amazon EC2
- EC2 Image Builder
- AWS Glue
- AWS License Manager
- AWS Network Firewall
- AWS Outposts
- AWS Resource Groups
- Amazon Route 53
- Amazon VPC

CORS Domains:

http://www.domainnamea.com,

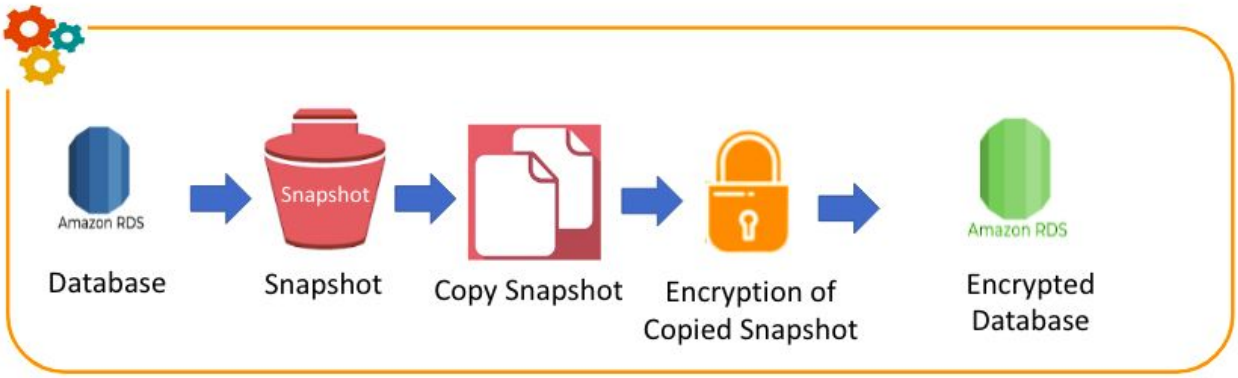
https://www.secure.domainnamea.com,

http://www.domainnameb.com.

Attempts

https://www.domainnameb.com

http://www.domainnameb.com:80



You currently manage a set of web servers hosted on EC2 Servers with public IP addresses. These IP addresses are mapped to domain names. There was an urgent maintenance activity that had to be carried out on the servers. The servers had to be stopped and restarted. Now the web application hosted on these EC2 Instances is not accessible via the domain names configured earlier. Which of the following could be a reason for this?

A. The Route 53 hosted zone needs to be restarted.

B. The network interfaces need to initialized again.

C. The public IP addresses need to be associated with the ENI again.

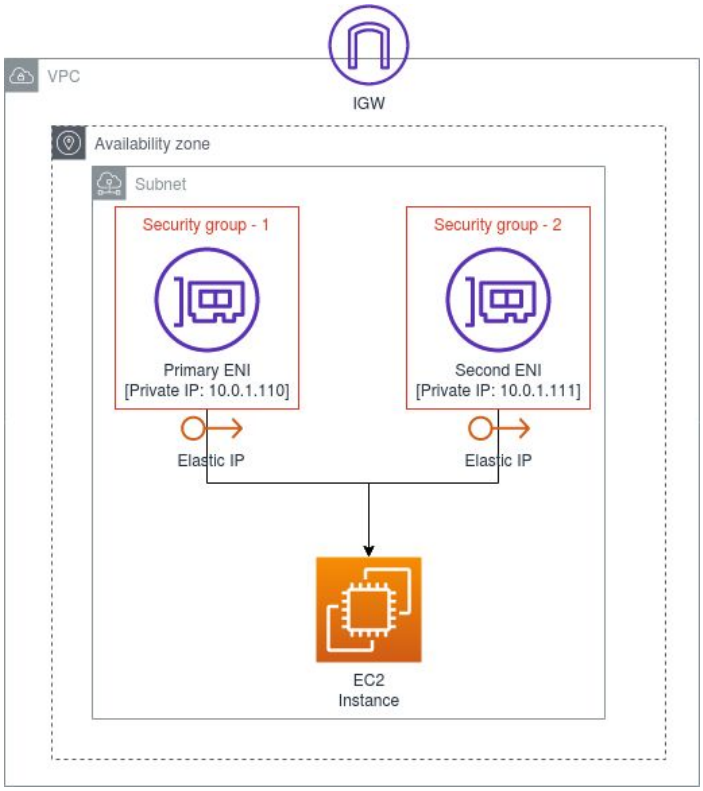
D. The public IP addresses have changed after the instance was stopped and started again.

ENI → ENA → EFA

- Upto 10 GBPS
- VMDq
- TCP/IP
- Multiple ENI/instance
- Traffic can traverse across subnets
- VPC Networking, General purpose
- Default

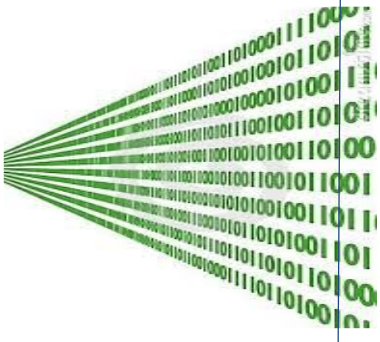
- Upto 25 GBPS
- SR-IOV
- TCP/IP
- Single setting/per instance
- Traffic can traverses across subnets
- Low latency apps
- Optional on supported instance type

- Upto 100 GBPS
- OS-Bypass
- SRD
- One EFA per instance
- OS Bypass traffic is limited to single subnet and is not routable
- HPC and ML Apps
- Optional on supported instance type



Exam tip: HPC & Machine Learning >>>>>> EFA

Real time Streaming | Capture | Transfer/Load | Analyze



Kinesis Video Stream

Kinesis Streams

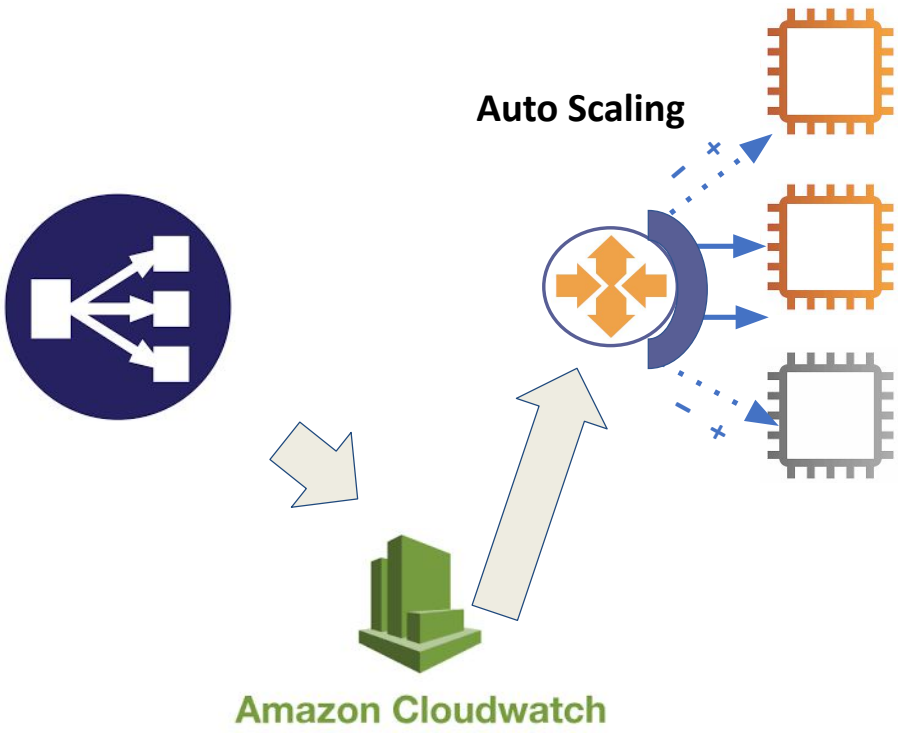
Kinesis Data Stream

Kinesis Firehose

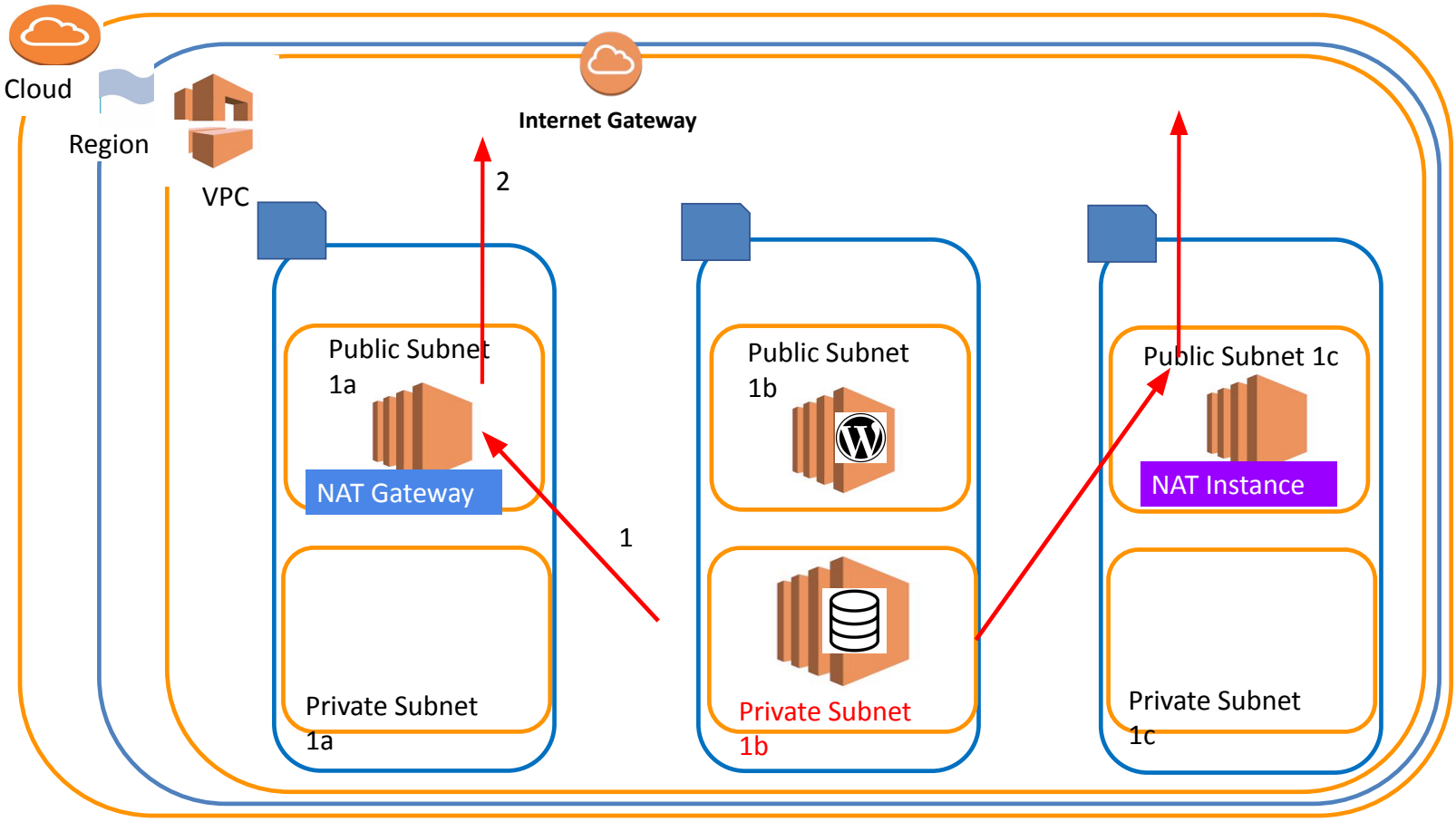
Load streaming data into Amazon S3, Amazon Redshift, and Amazon Elasticsearch Service

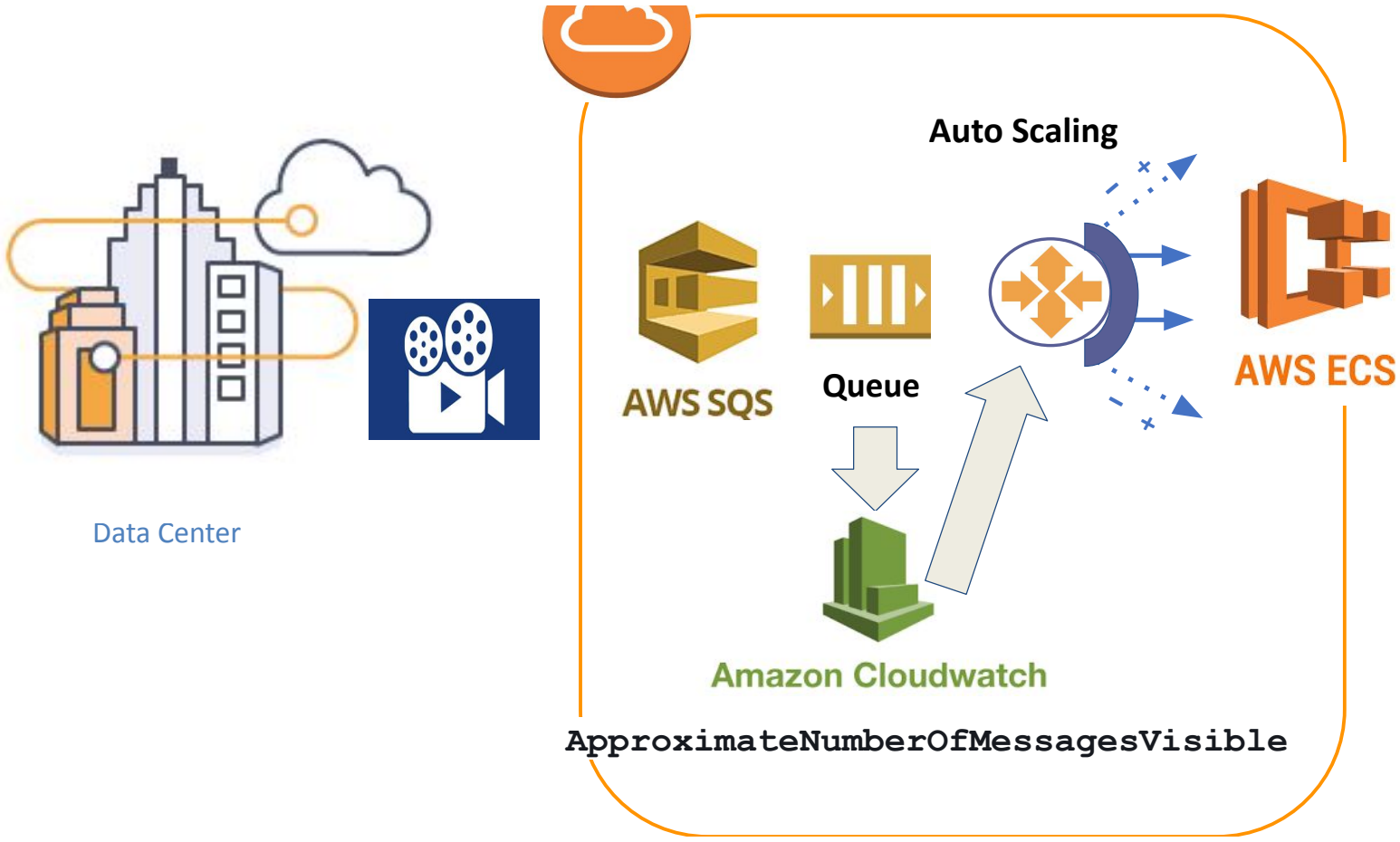
Kinesis Analytics

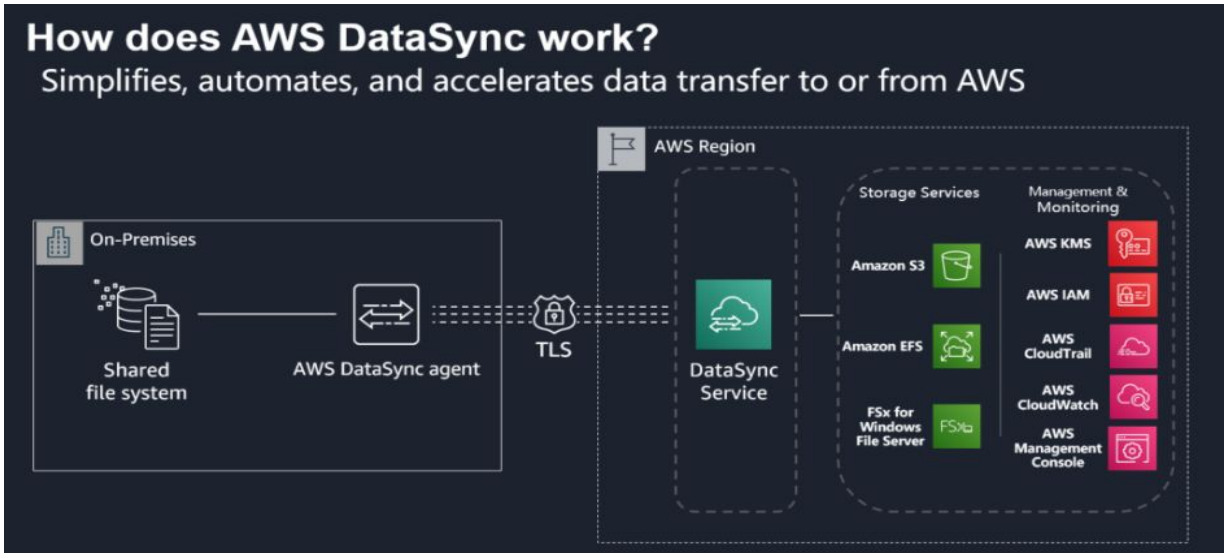
Analyze data streams using standard SQL queries



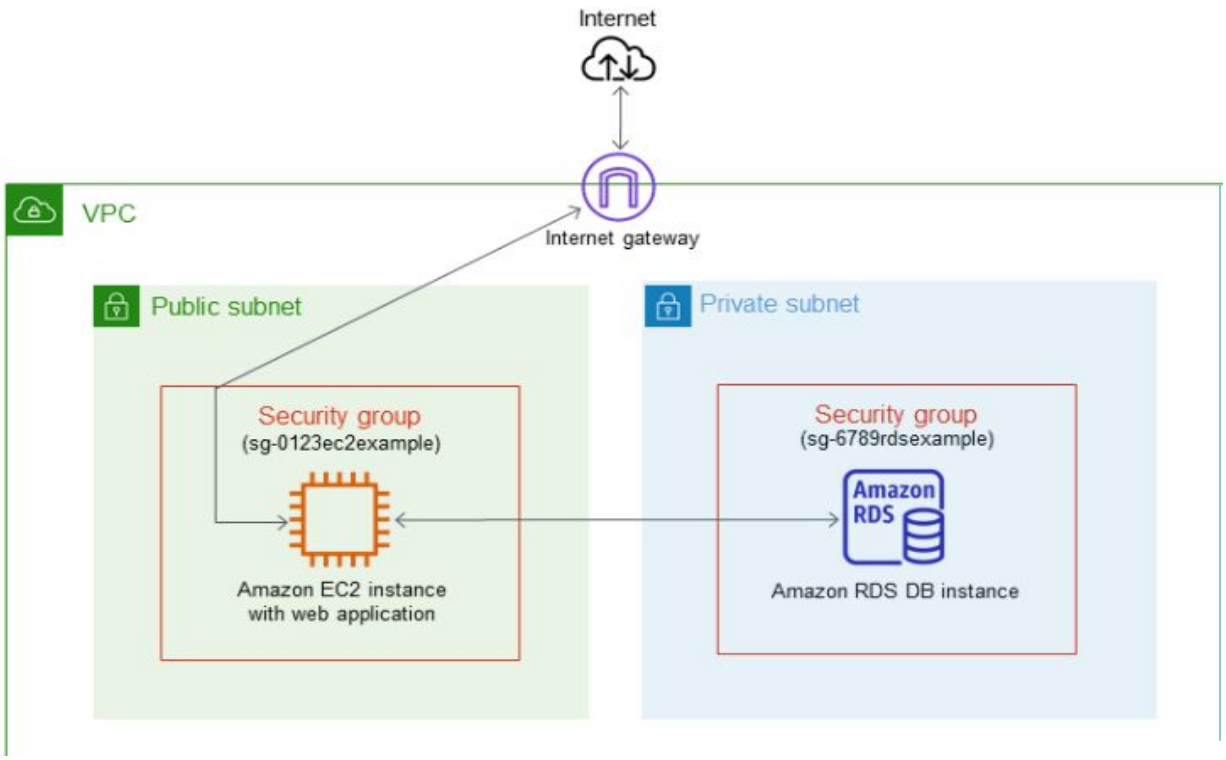
CPU utilization

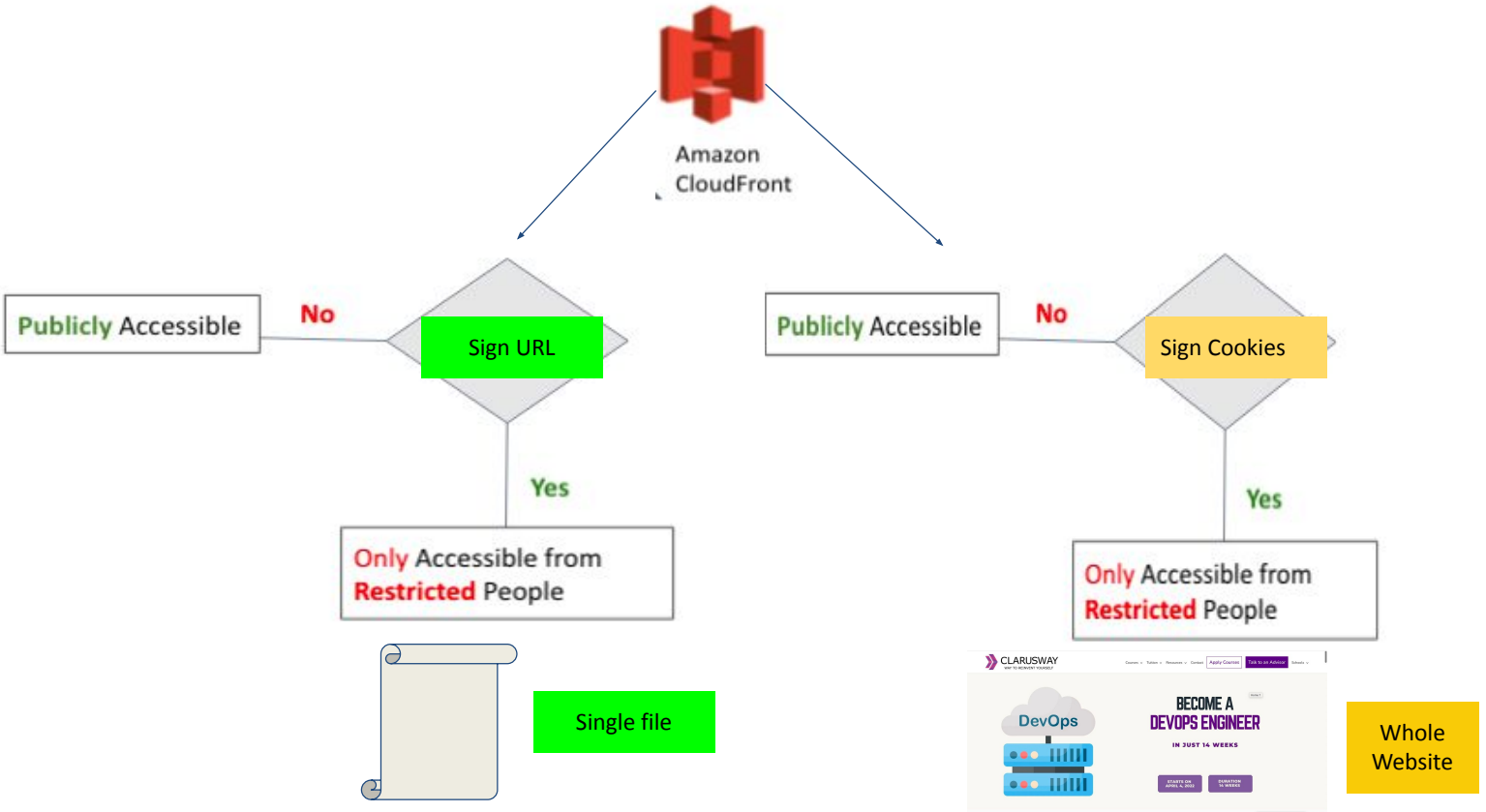


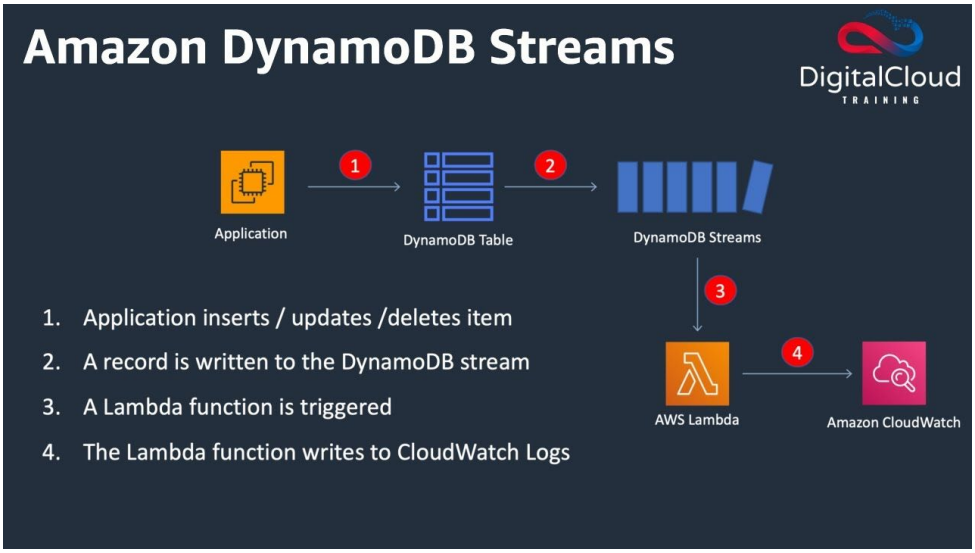




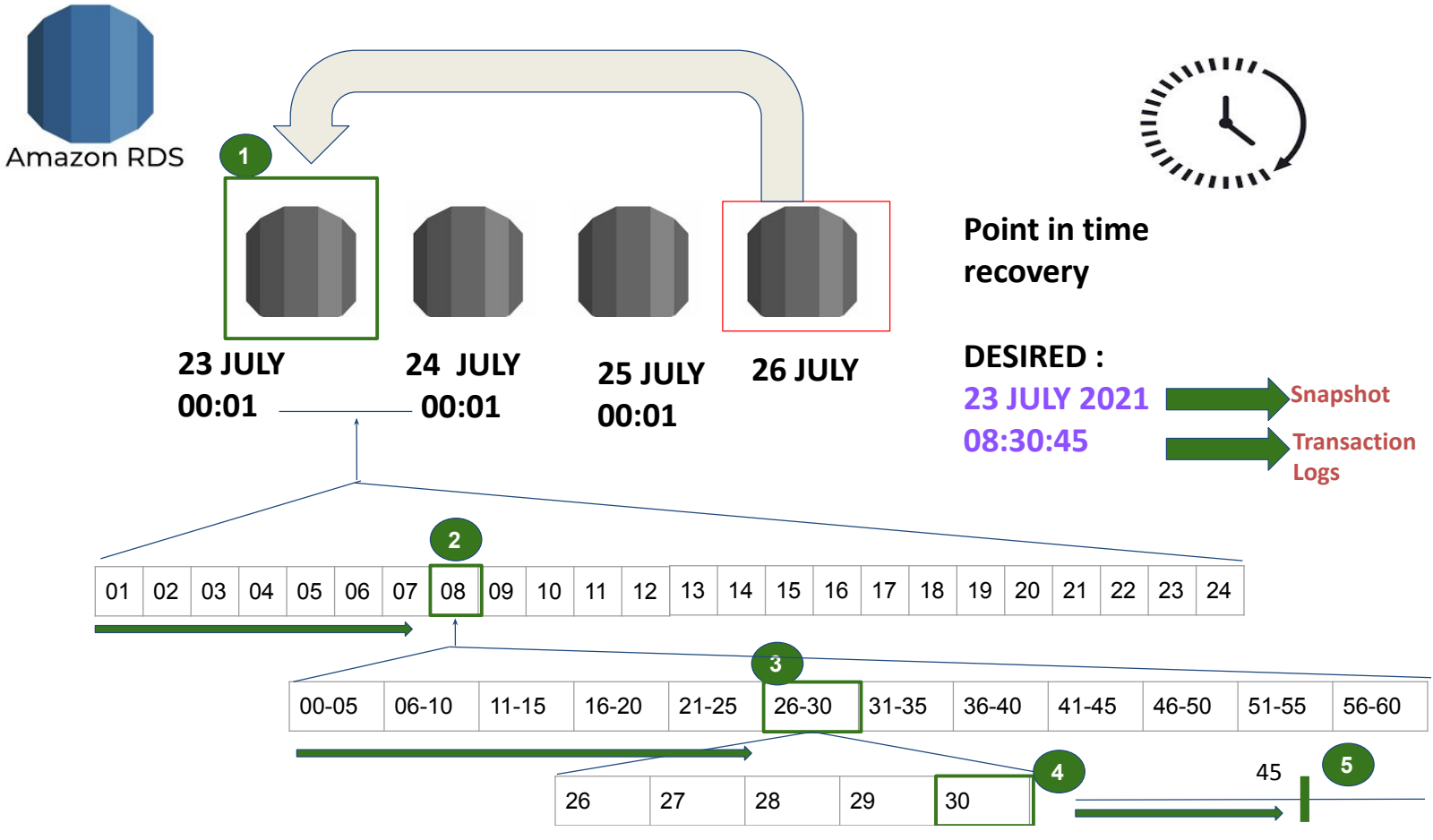
- **Public endpoints**:
- **Federal Information Processing Standard (FIPS) endpoints**: USA and Canada
- **Virtual private cloud (VPC) endpoints**: If you use a VPC endpoint, all communication from DataSync to AWS occurs through the endpoint in your AWS VPC. This establishes a private connection between your self-managed storage system, your VPC, and AWS services, providing extra security as your data is copied over the network.

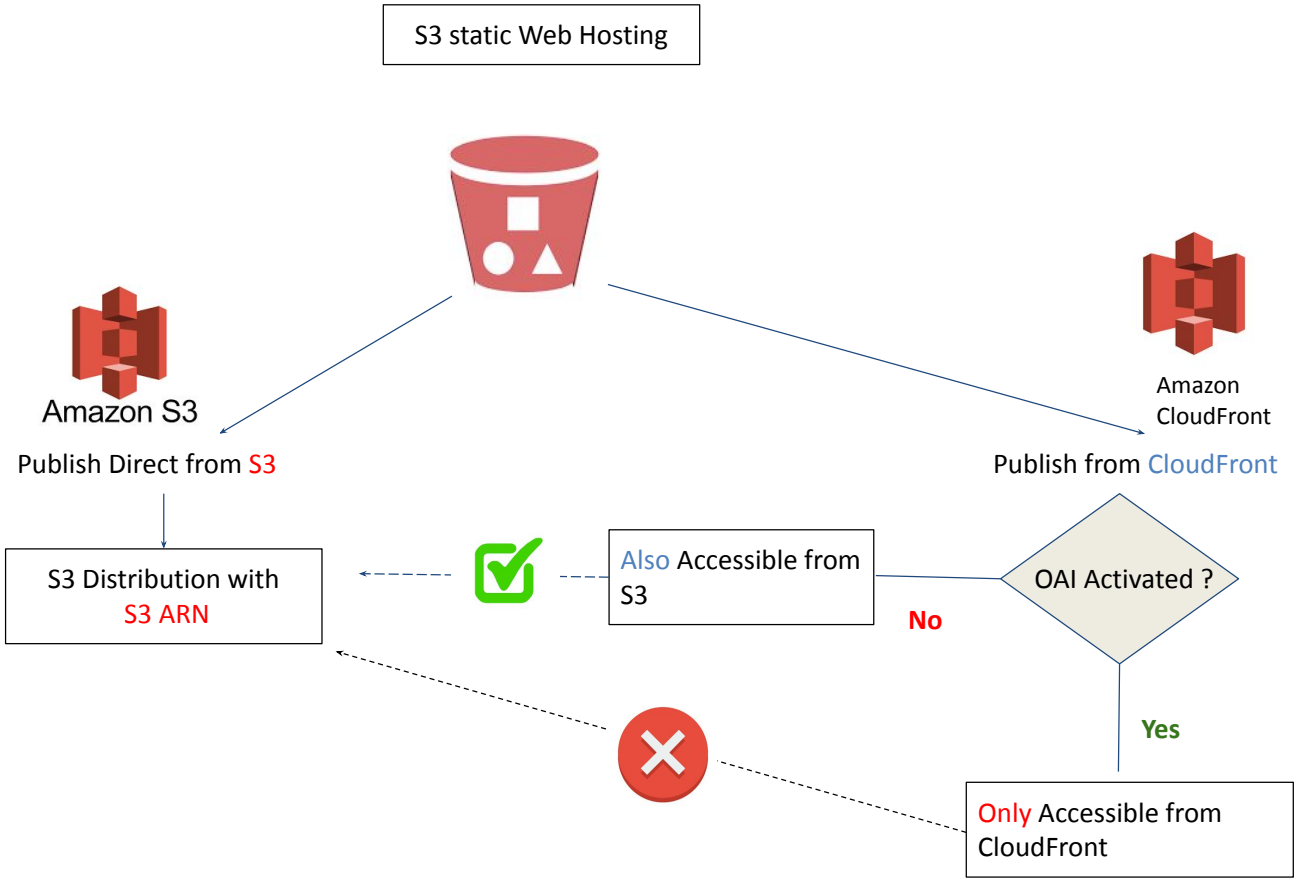

Internet
VPC
Internet gateway
Public subnet
Private subnet
Security group
(sg-0123ec2example)
Amazon EC2 instance
with web application
Security group
(sg-6789rdsexample)
Amazon
RDS
Amazon RDS DB instance

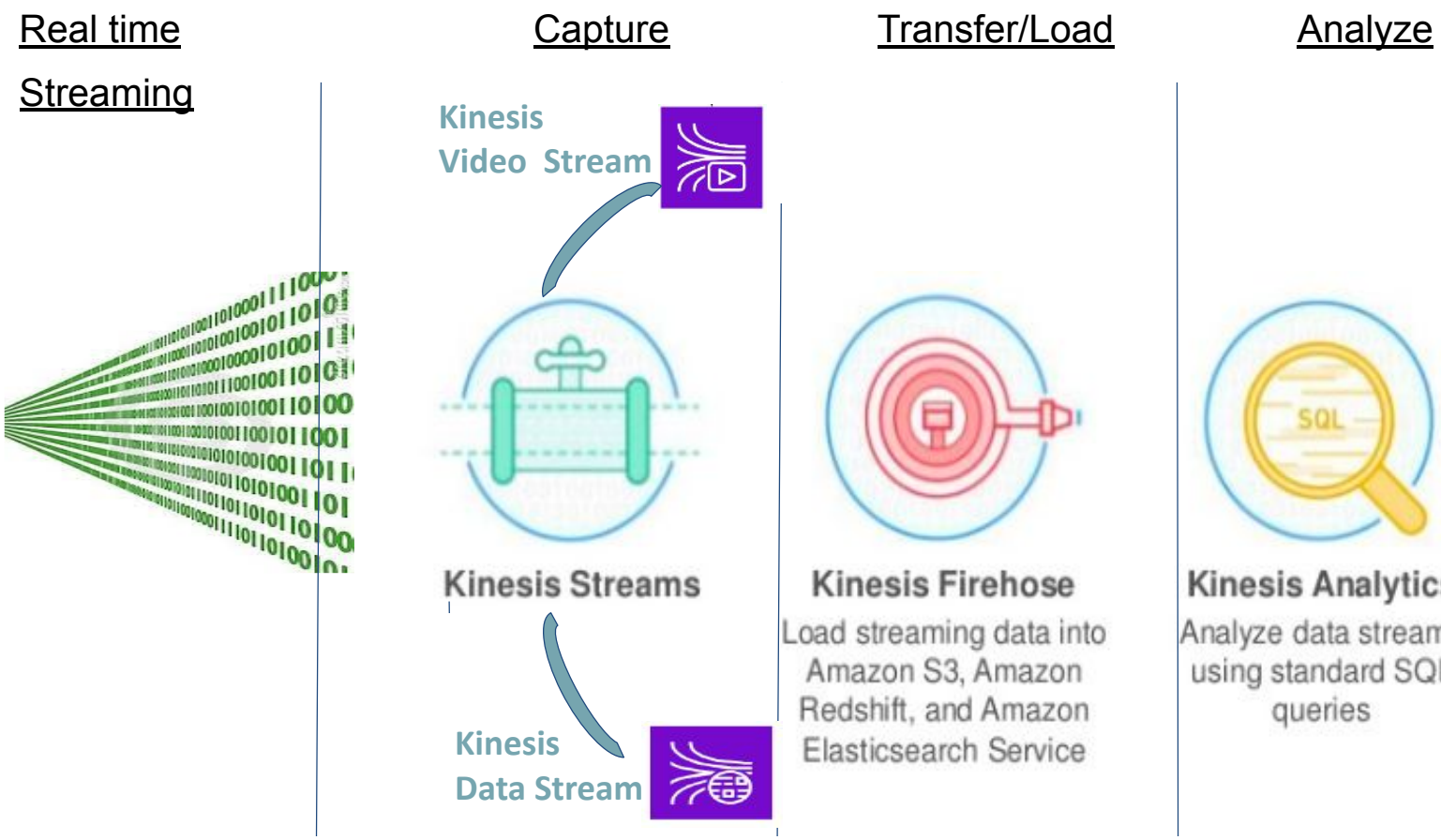

Amazon
CloudFront
Publicly Accessible
No
Sign URL
Yes
Only Accessible from
Restricted People
Single file
Publicly Accessible
No
Sign Cookies
Yes
Only Accessible from
Restricted People
CLARUSWAY
DevOps
BECOME A
DEVOPS ENGINEER
IN JUST 14 WEEKS
Whole
Website



When enabled, DynamoDB Streams captures a time-ordered sequence of item-level modifications in a DynamoDB table and durably stores the information for **up to 24 hours. Applications can access a series of stream *records*, which contain an item change, from a DynamoDB stream in near real time.**




S3 static Web Hosting
Amazon S3
Publish Direct from S3
Amazon CloudFront
Publish from CloudFront
S3 Distribution with S3 ARN
Also Accessible from S3
OAI Activated ?
No
Yes
Only Accessible from CloudFront


Real time Streaming
Capture
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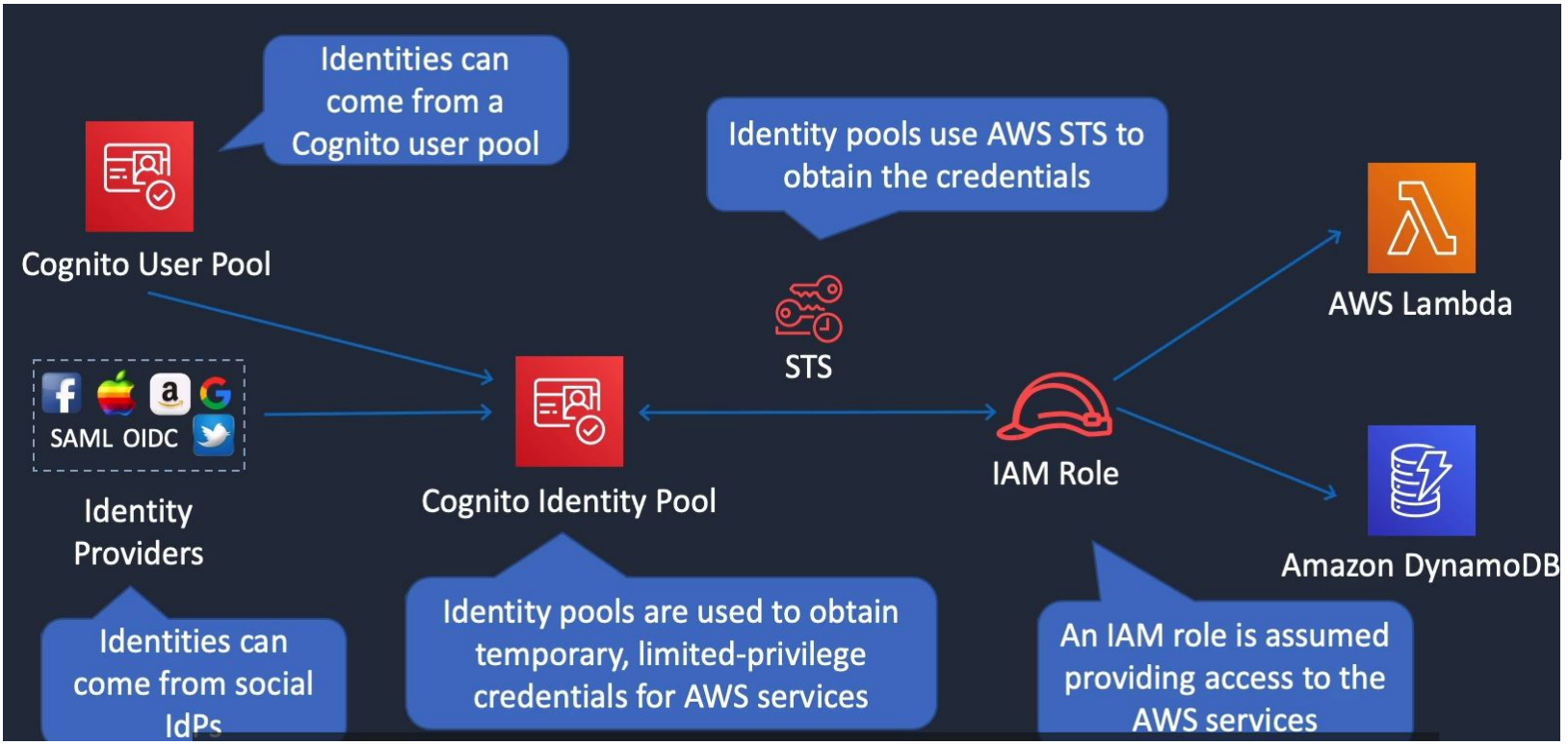
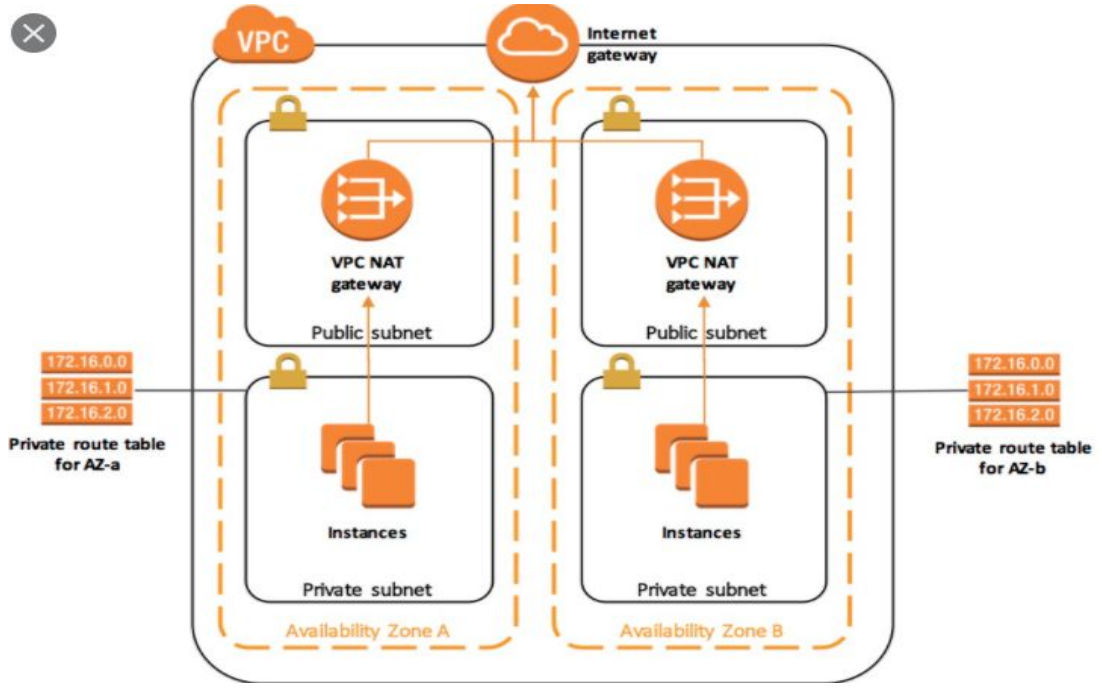
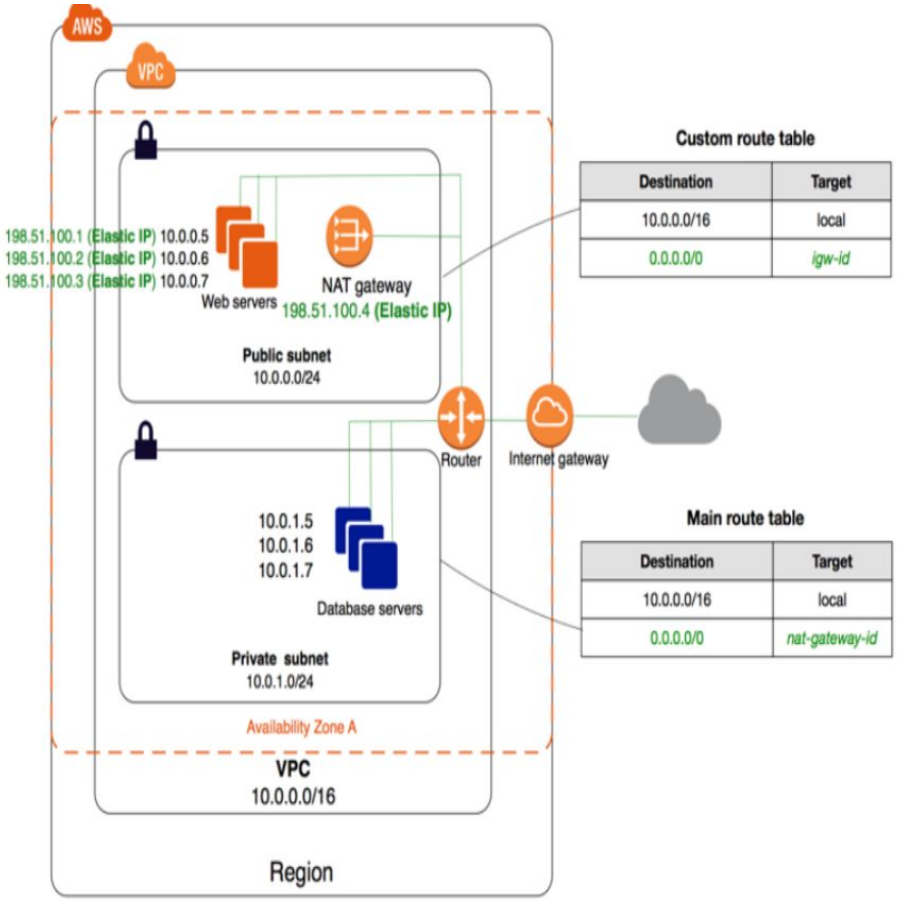
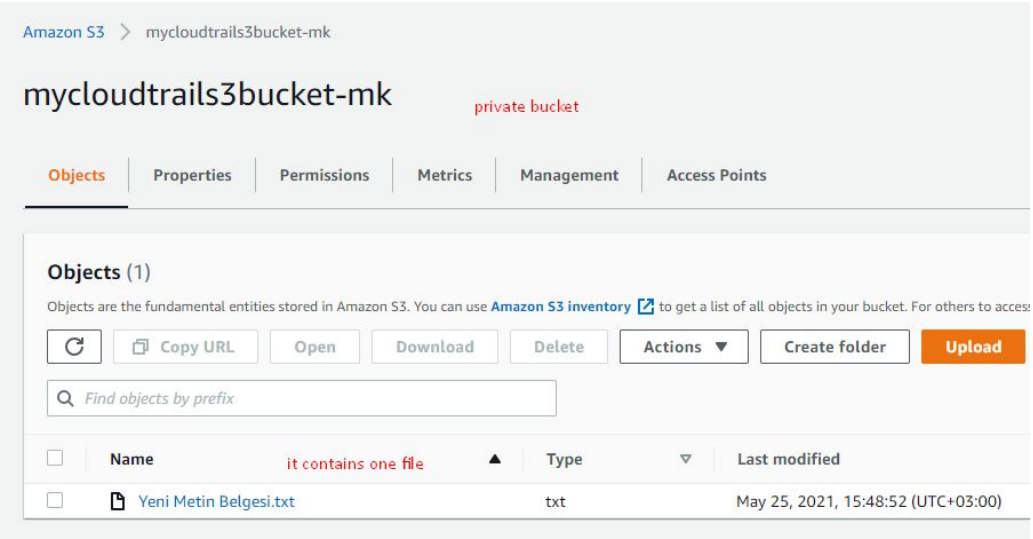
SQL
Kinesis Analytics
Analyze data streams using standard SQL queries



If you have resources in multiple Availability Zones and they share one NAT Gateway, in the event that the NAT Gateway's Availability Zone is down, resources in the other Availability Zones lose internet access. To create an Availability Zone-independent architecture, create a NAT Gateway in each Availability Zone and configure your routing to ensure that resources use the NAT Gateway in the same Availability Zone.

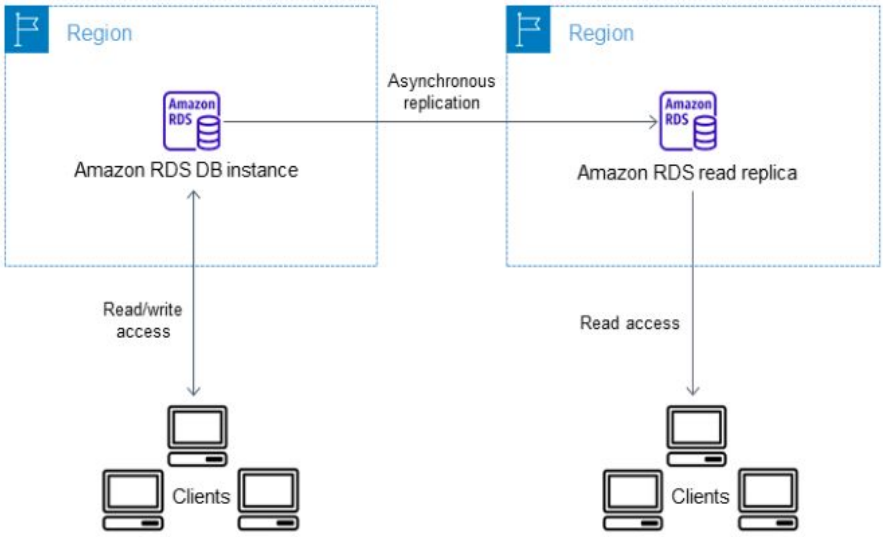




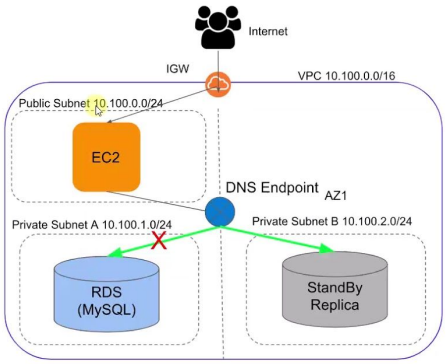



```
$ aws s3 presign s3://mycloudtrails3bucket-mk/"Yeni Metin Belgesi.txt" --expires-in 30
https://mycloudtrails3bucket-mk.s3.us-east-1.amazonaws.com/Yeni%20Metin%20Belgesi.txt?X-Amz-
Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=AKIAY3YMFVJJYLFDLWV5%2F20210525%2Fus-east-1%2Fs3
%2Faws4_request&X-Amz-Date=20210525T125743Z&X-Amz-Expires=30&X-Amz-SignedHeaders=host&X-Amz-
Signature=b02d2c978829ff3bed34001380b8b9e0b51262727d2b37391c4b5c12e0d6f31c
```

With Amazon RDS, you can create a MariaDB, MySQL, Oracle, or PostgreSQL read replica in a different AWS Region from the source DB instance. Creating a cross-Region read replica isn't supported for SQL Server on Amazon RDS.



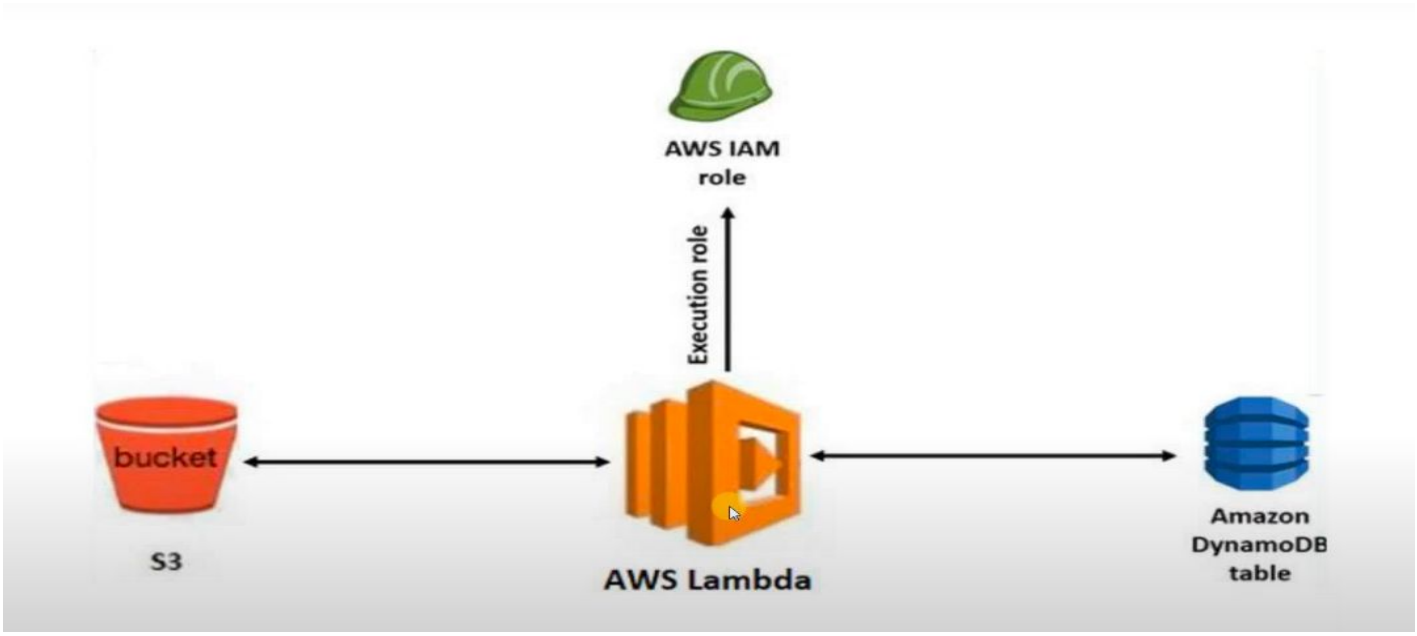
RDS Multi-AZ Failover



Availability -

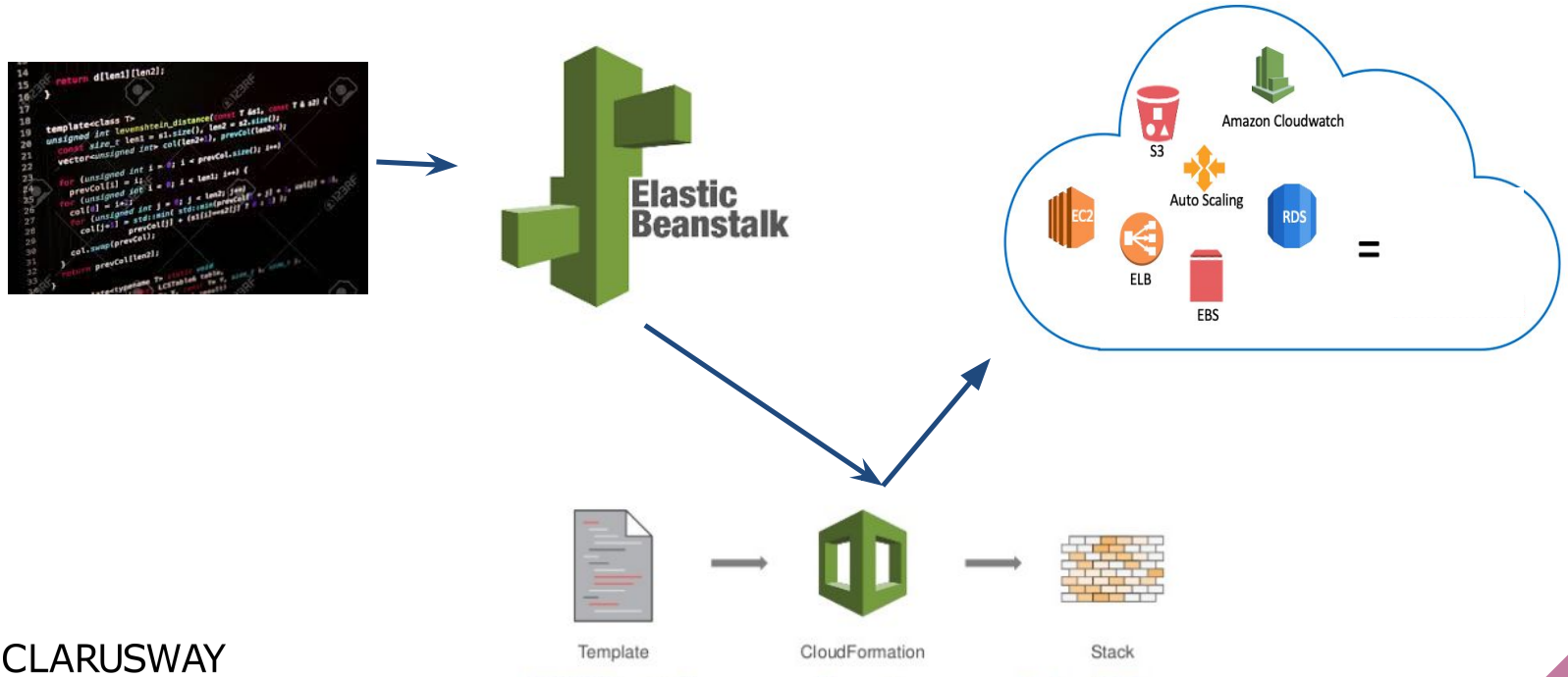
Performance- Asenkron

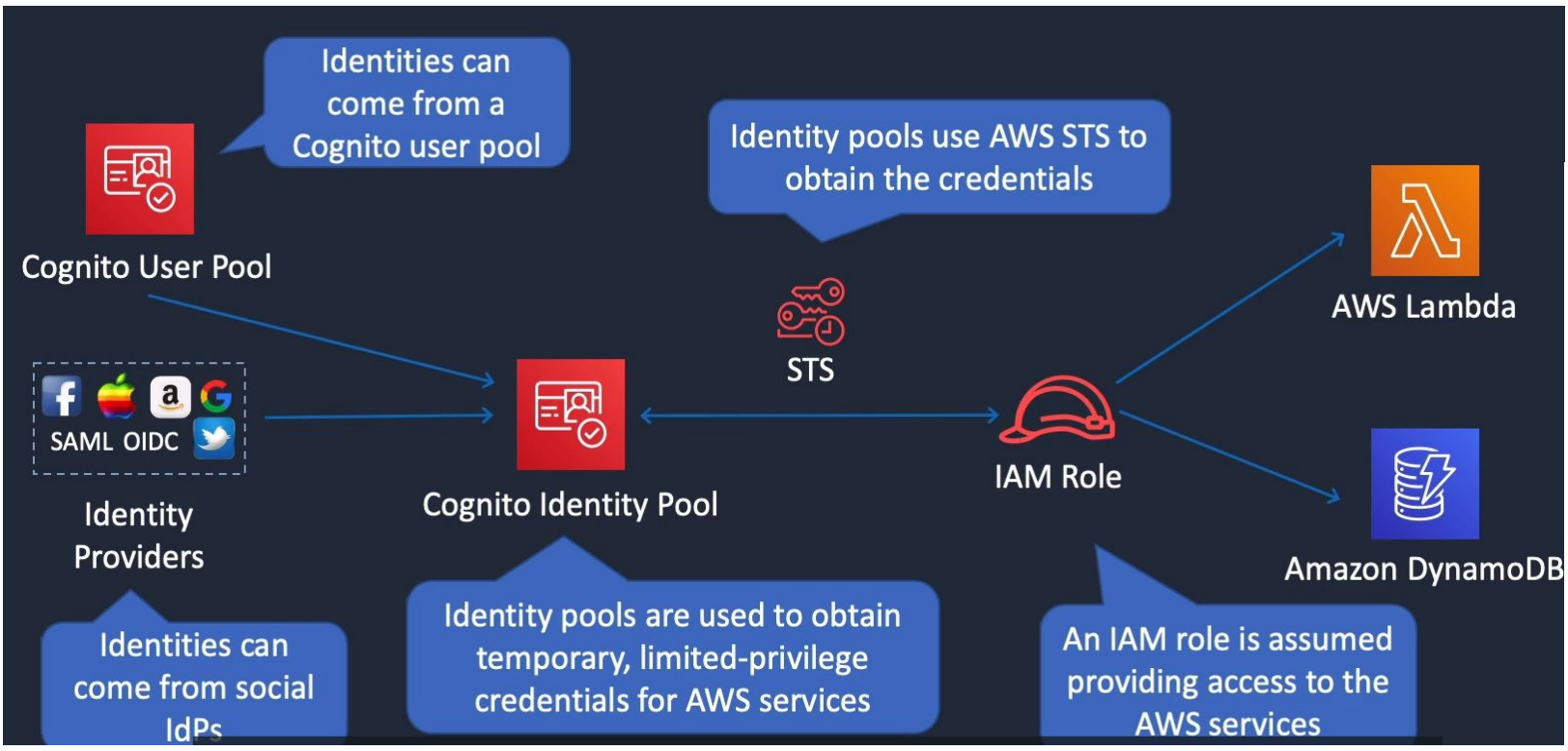
Exam tip: DynamoDb and Metadata

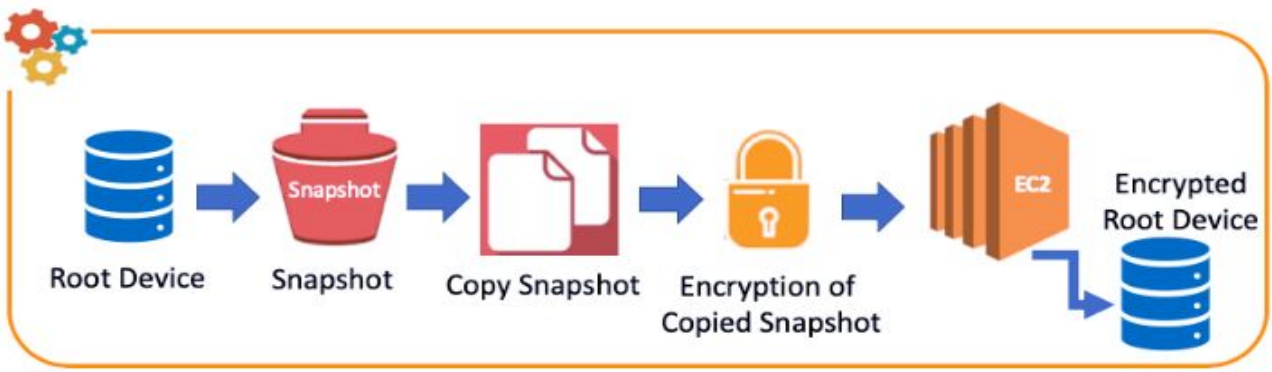


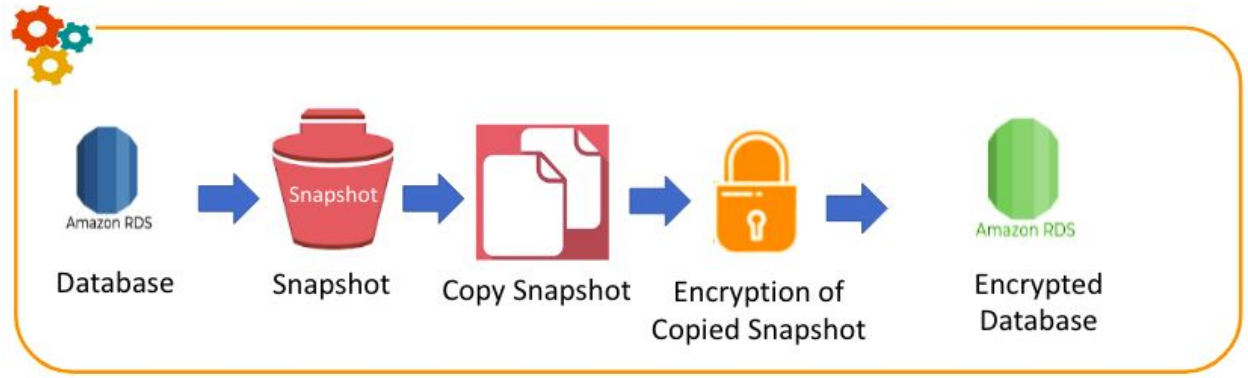
Introduction to Elastic Beanstalk

Why AWS Elastic Beanstalk?



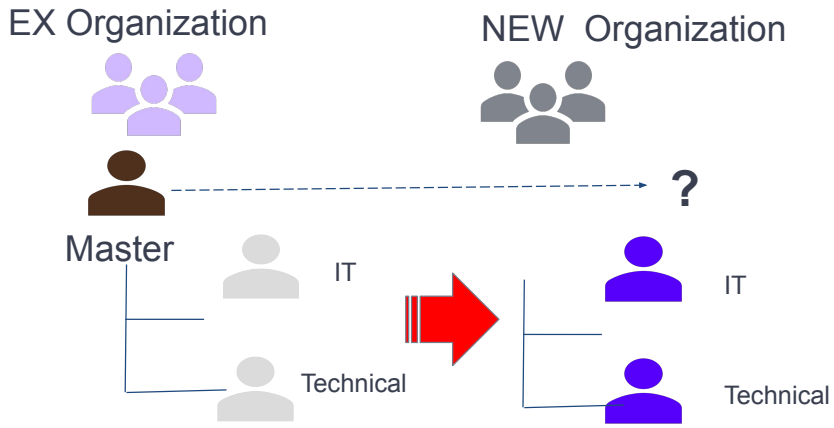






MEMBER AND MASTER ACCOUNT LEAVING PROCESS

1. Remove the **member account** from the old Organization.
2. Send an invite to the member account from the new Organization.
3. Accept the invite to the new Organization from the member account.
4. Delete the old Organization.
5. Send an invite to the master account
6. Accept the invite to the new Organization from the master account



Role Credentials

```
aws_access_key_id=ASIA5RBXKVCZWCMV4AFJ

aws_secret_access_key=23uUyY07I0PKG1URM6iQPV+A8wSsvLEbmHEA37wF

aws_session_token=IQoJb3JpZ2luX2VjEK//////////wEaCXVzLWVhc3QtMSJHMEUCIGrn7HEV38ejafaba56pEv1UxDIPjFdYLjgLSv0UvpmiA
iEA4b9Z2Noc0Ah3ru6bogoW+iBRtUrdg05zk7LkM4HQaNsqkgMIFxACGgw5Mjk5NzY0NjE0OTEiDAwgg62YKfWxIzb1TSrvArdvoRgYW4EvWtPAkM9R
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sL/OTBH
```
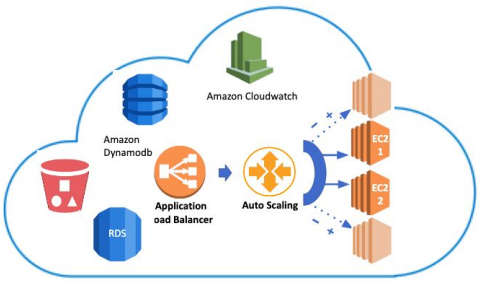

Once an entity assumes a role, it receives **temporary credentials** in the form of an **access key**, **secret key** and **session token**.

Note that with an **IAM user**, there is **no session token**, since the credentials are **permanent**

CLARUSWAY
WAY TO REINVENT YOURSELF

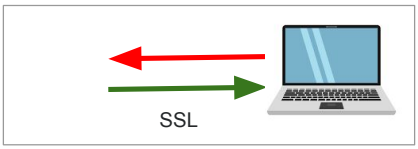
Component	Description
Templates	The JSON or YAML text file that contains the instructions for building out the AWS environment
Stacks	The entire environment described by the template and created, updated, and deleted as a single unit
StackSets	AWS CloudFormation StackSets extends the functionality of stacks by enabling you to create, update, or delete stacks across multiple accounts and regions with a single operation
Change Sets	A summary of proposed changes to your stack that will allow you to see how those changes might impact your existing resources before implementing them



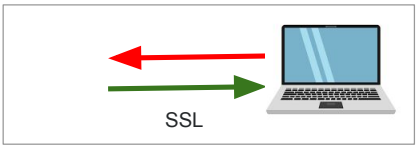
OpsWorks Stacks **CloudFormation** **Elastic Beanstalk**

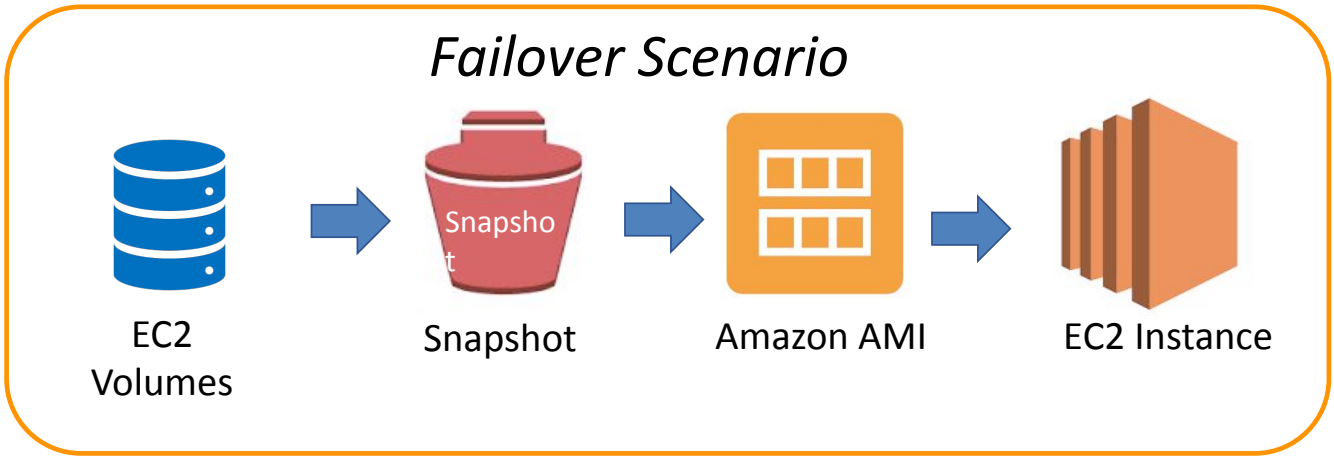
Server Side Encryption (At Rest)

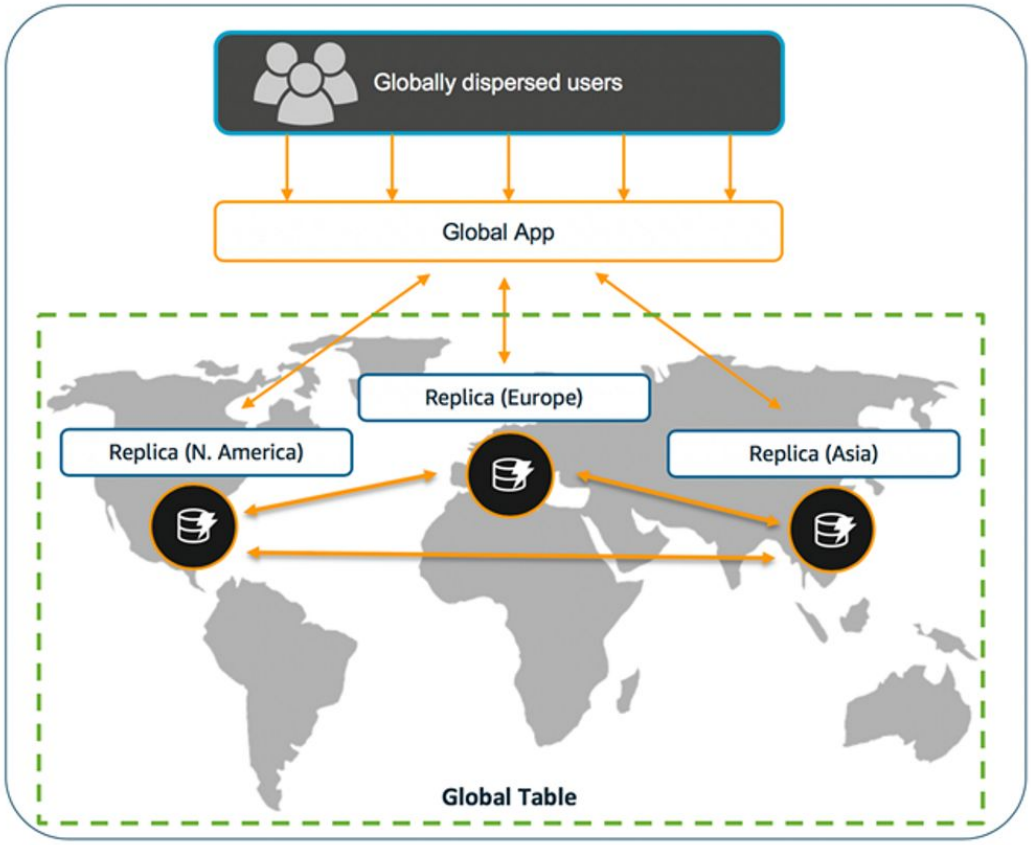
Encryption in Transition

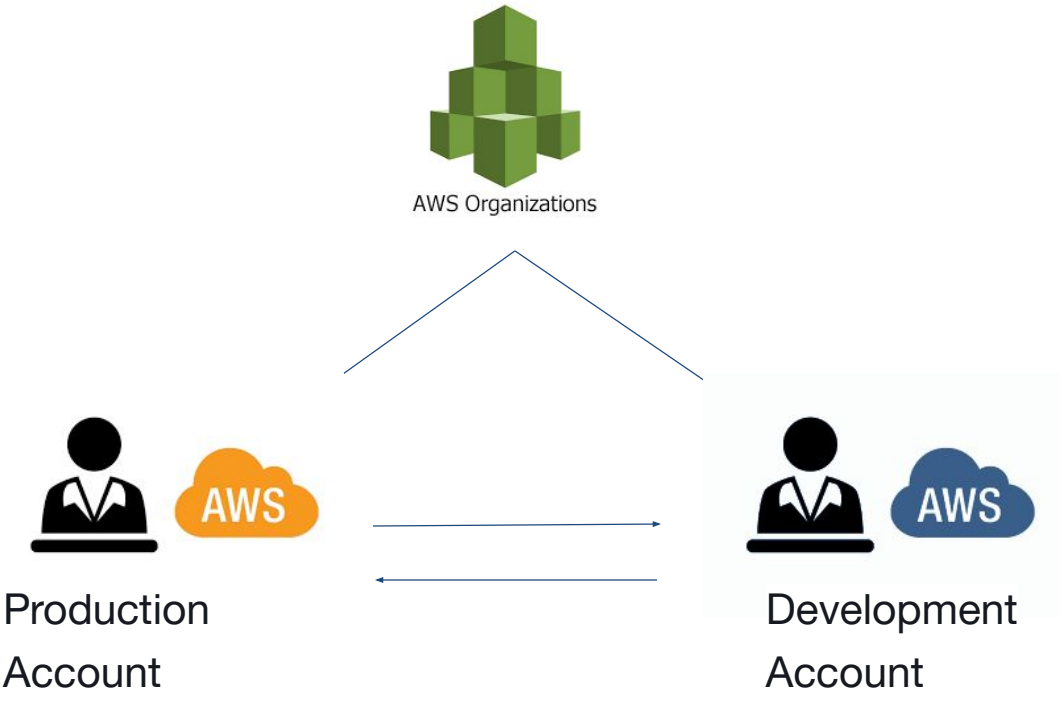


Client Side Encryption
(Transition+At Rest)

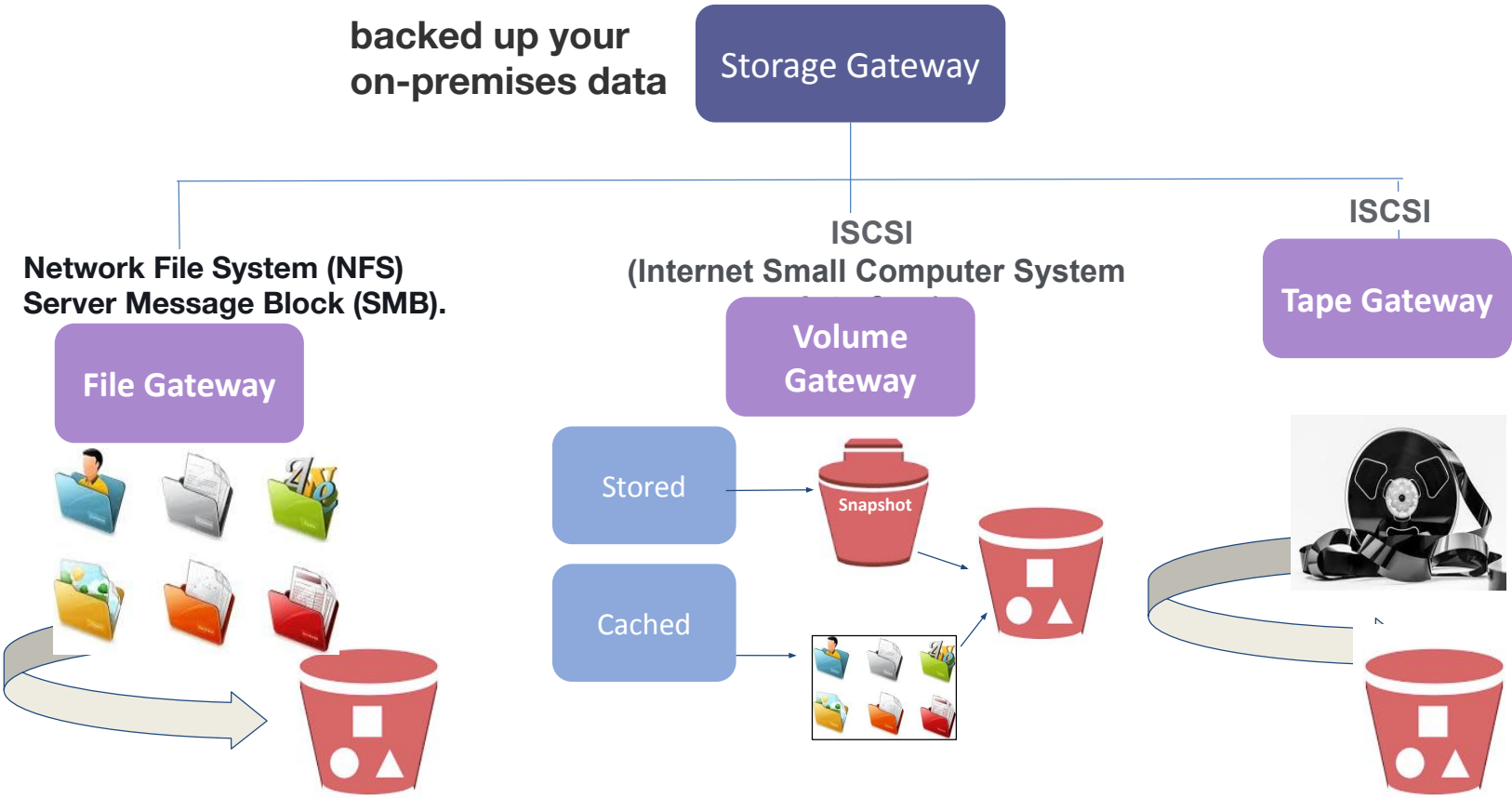








- [x] Enable resource sharing in AWS Organizations with RAM



Info: The term **legacy** database commonly refers to a database that has been in use for many years and is therefore unsuitable for modern apps and environments.

- DMS create a replication instance for migrating. Your databases are fully operational when migrating.

- Homogeneous database migrations **(Oracle to Oracle) (need Engine conversion)**
Heterogenous database migrations **(Microsoft SQL to Aurora) (Use SCT)**

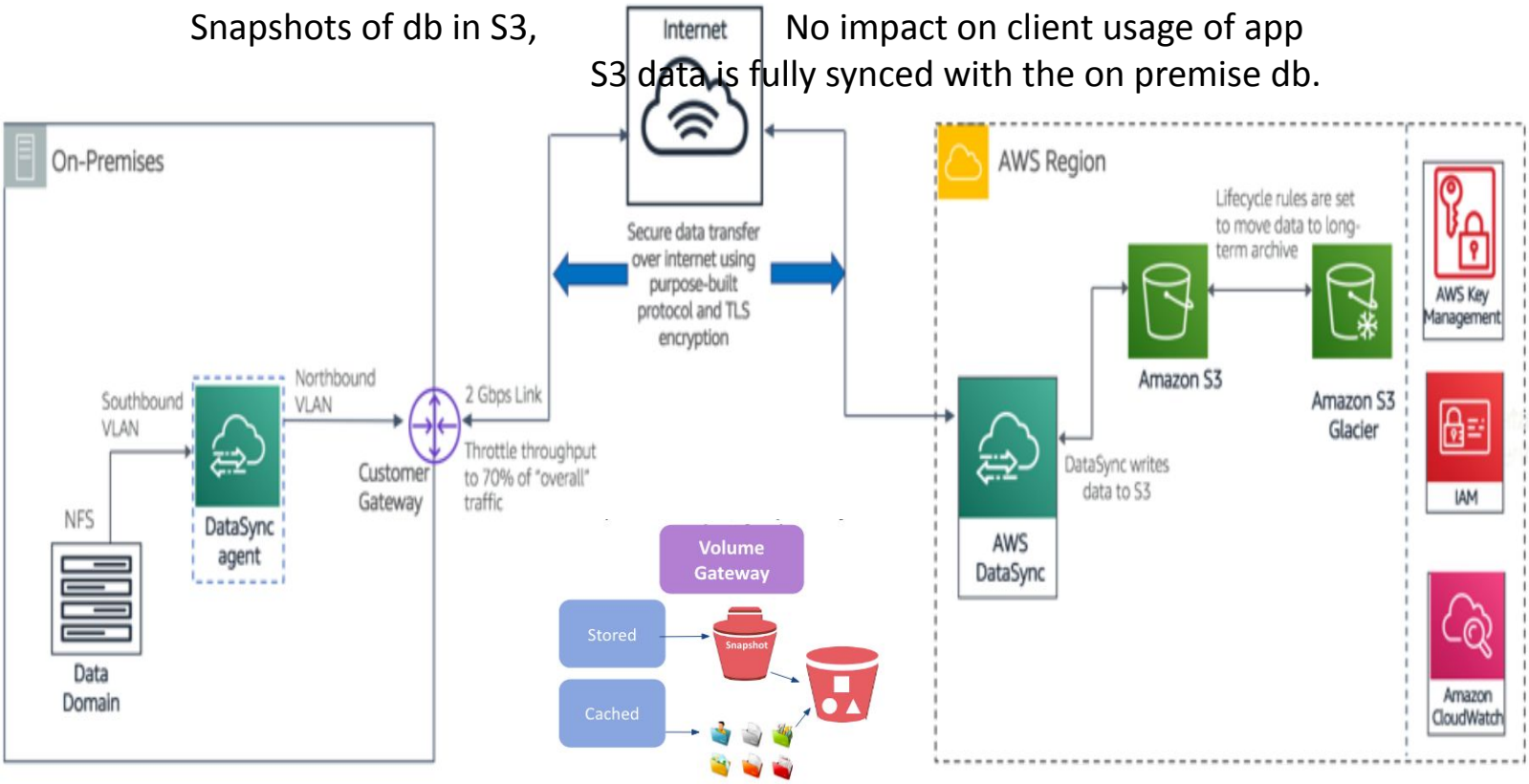
- Use **SCT (Schema conversion tool)** from one schema to another schema for **Heterogenous migrations**

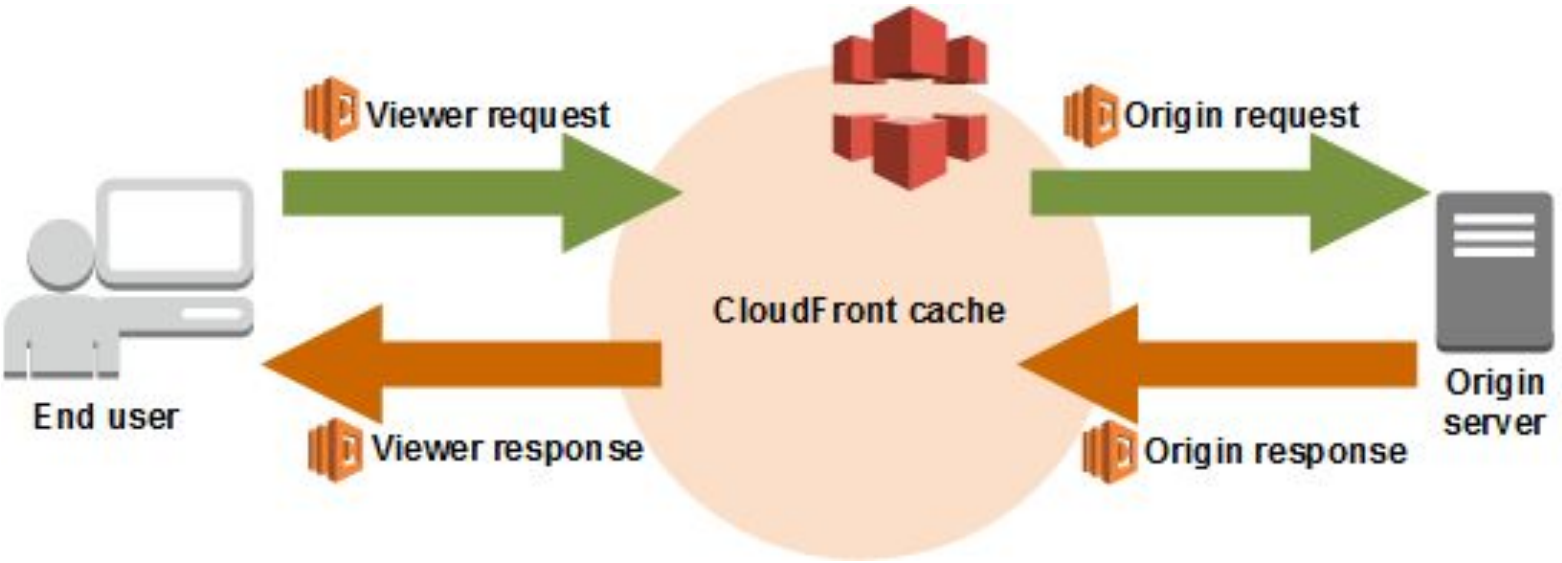
From Legacy to DynamoDb >>>>>>> Heterogenous database migrations

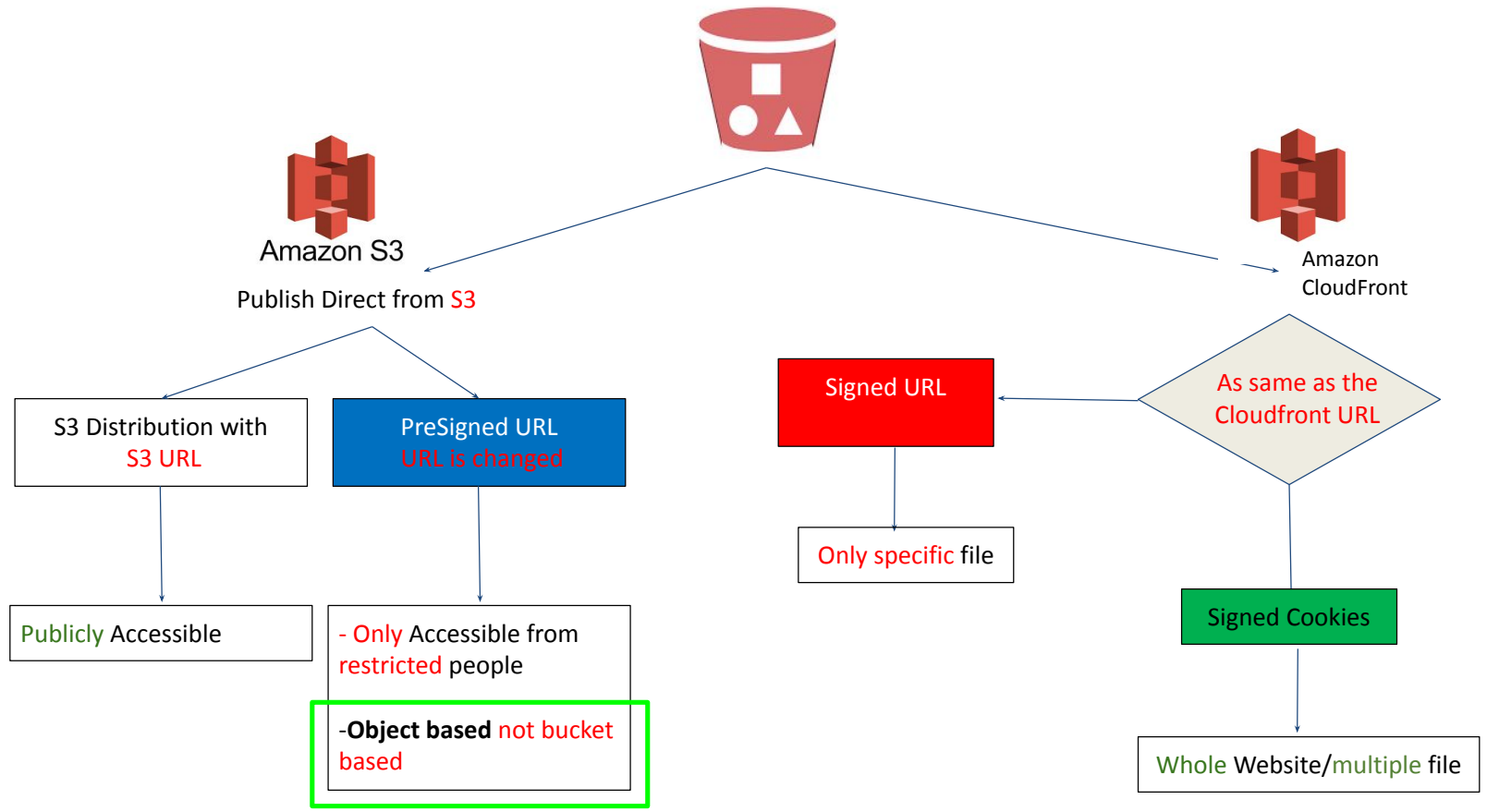
SCT (Schema conversion tool)

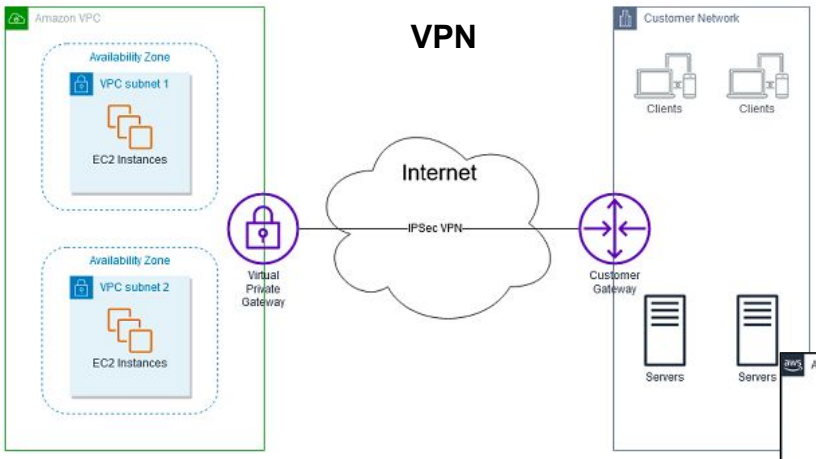
KEY words: Transfer db to AWS ,
Snapshots of db in S3,

No impact on client usage of app
S3 data is fully synced with the on premise db.



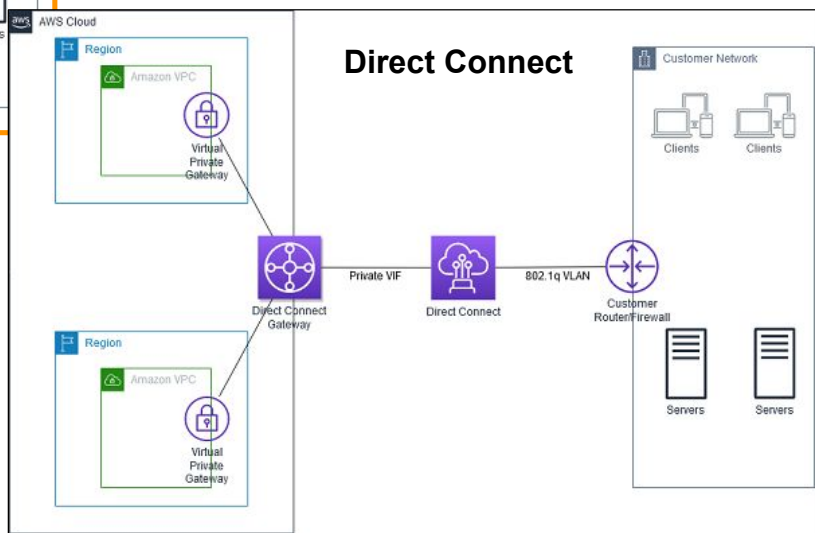


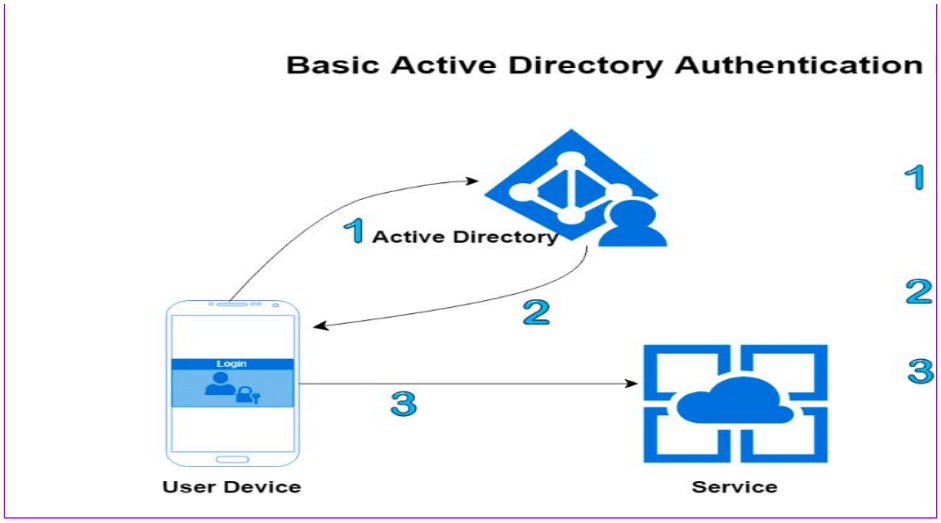




Within the term "IPsec," "IP" stands for "Internet Protocol" and "sec" for "secure."

VPN connections are very cheap (**$37.20**/month
Built in a few minutes





AWS Directory Service for Microsoft Active Directory

Simple AD

AD Connector

Amazon Cognito

SAA 03 Practice Test 3

Osvaldo