Know Your Initialisms

IAM Identity and Access Management

S3 Simple Storage Service

SWF Simple Workflow Service

SNS Simple Notification Service

SQS Simple Queue Service

SES Simple Email Service

SSM Simple Systems Manager

RDS Relational Database Service

VPC Virtual Private Cloud

VPN Virtual Private Network

CFN CloudFormation

WAF Web Application Firewall

MQ Amazon ActiveMQ

ASG Auto Scaling Groups

TAM Technical Account Manager

ELB Elastic Load Balancer

ALB Application Load Balancer

NLB Network Load Balancer

GWLB Gateway Load Balancer

CLB Classic Load Balancer

EC2 Elastic Cloud Compute

ECS Elastic Container Service

ECR Elastic Container Repository

EBS Elastic Block Storage

EFS Elastic File Storage

EMR Elastic MapReduce

EB Elastic Beanstalk

ES Elasticsearch

EKS Elastic Kubernetes Service

MSK Managed Kafka Service

RAM AWS Resource Manager

ACM Amazon Certificate Manager

PoLP Principle of Least Privilege

IoT Internet of Things

RI Reserved Instances

AWS Config vs AWS AppConfig

AWS Config

AWS Config is a governance tool for Compliance as Code (CoC).

You can create rules that will check to see if resources are configured the way you expect them to be.

If a resource drifts from the expected configuration you are notified or AWS Config can auto-remediate (correct) the configuration back to the expected state

AWS AppConfig

AWS App Config is used to automat the process of deploying application configuration variable changes to your web-application(s).

You can write a validator to ensure the changed variable will not break your web-app

You can monitor deployments and automate integrations to catch errors or rollback.

SNS vs SQS

The Both **Connect Apps** via Messages

Simple Notifications Service
Pass Alongs Messages eg. PubSub

Send notifications to **subscribers** of **topics** via multiple protocol. eg, HTTP, **Email**, SQS, SMS

SNS is generally used for sending <u>plain text emails</u> which is triggered via other AWS Services. The best example of this is billing alarms.

Can retry sending in case of failure for **HTTP**S

Really good for webhooks, simple internal emails, triggering lambda functions

Simple Queue Service
Queue Up Messages, Guaranteed Delivery

Places messages into a **queue.** Applications pull queue using **AWS SDK**

Can retain a message for up to 14 days
Can send them in sequential order or in parallel
Can ensure only one message is sent
Can ensure messages are delivered at least once

Really good for delayed tasks, queueing up emails

SNS vs SES vs PinPoint vs Workmail

They All Send Emails

Simple Notifications Service
Practical and Internal Emails

Send notifications to **subscribers** of **topics** via multiple protocol. eg, HTTP, **Email**, SQS, SMS

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Most exam questions are going to be talking about SNS because lots of services can trigger SNS for notifications.

You Need to Know what are **Topics** and **Subscriptions** regarding **SNS**

Simple Email Service
Transactional Emails

Emails that should be triggered based on in-app actions: Signup, Reset Password, Invoices...

- A cloud based email service. eg. **SendGrid**
- SES sends **html emails**, SNS cannot.
- SES can receives inbound emails
- SES can create Email Templates
- Custom domain name email
- Monitor your email reputation

Amazon PinPoint
Promotional Emails

Emails for marketing

- Create email campaigns
- Segment your contacts
- Create customer journeys via email
- A/B emailing testing

Amazon Workmail
Email Web Client

Similar to Gmail and Outlook. Create company emails, read, write and send emails from a Web Client within AWS Management Console

Amazon Inspector vs AWS Trusted Advisor

Both are security tools and they both perform audits

Amazon Inspector

Audits **a single EC2 instance** that you've selected

Generates a report from a long list of security checks i.e 699 checks.

Trusted Advisor

Trusted Advisor **doesn't generate out a PDF** report.

Gives you a **holistic view** of recommendations across multiple services and best practices

eg.
You have open ports on these security groups

You should enable MFA on your root account when using trusted advisor.

Connect Names Services

They all have **"Connect"** in the name but they are not related or similar in functionality

Direct Connect
- A Dedicated Fiber Optics Connection from your DataCenter to AWS
- Intended for large enterprises with their own datacenter and they need an insanely fast and *private* connection directly AWS.
- If you need a **secure connection** you need apply a AWS VPN connection on-top of Direct Connect

Amazon Connect
- Call Center as a Service
- Get a toll free number, accept inbound and outbound calls, setup automated phone systems.
- Interactive Voice System (IVS)

Media Connect
- New Version of Elastic Transcoder, Converts Videos to Different Video Types
- You have 1000 of videos you and you need to transcode them into different videos format, maybe you need to apply watermarks, or insert introduction video in front of every video

Elastic Transcoder vs MediaConvert

Both services transcodes videos

Elastic Transcoder
The Old Way

AWS Elemental MediaConvert
The New Way

Elastic Transcoder was the original transcoding service. It may have programmatic APIs or workflows not available in MediaConvert.

Its exists due to legacy customers still using the platform

MediaConvert is a more robust transcoding service that can preform various operations during transcoding.

- Transcodes videos to streaming formats

- Transcodes videos to streaming formats
- Overlays images
- Insert videos clips
- Extracts captions data
- Robust UI

AWS Artifact vs Amazon Inspector

Both Artifact and Inspector **compile out PDFs**

AWS Artifact

Why should an enterprise trust AWS?

Generates a security report that's based on **global compliance frameworks** such as:

- Service Organization Control (SOC)
- Payment Card Industry (PCI)

Amazon Inspector

How do we know this EC2 instance is Secure? Prove It?

Runs a script that analyzes your EC2 instance, then generates a PDF report telling you which security checks passed.

Audit tool for security of EC2 instances

ELB vs ALB vs NLB vs GWLB vs CLB

Cheat sheets, Practice Exams and Flash cards 👉 **www.exampro.co/clf-c01**

Elastic Load Balancer (ELB) has 4 different types of possible load balancers.

Application Load Balancer (ALB)
Layer 7 - HTTP/S
Routing Rules
- create rules to change routing based on information found in a HTTP/S request

Can attach an AWS WAF

Network Load Balancer (NLB)
Layer 3 and 4 – TCP and UDP

Where extreme performance is required for **TCP and TLS traffic**

Capable of handling millions of requests per second while maintaining **ultra-low latencies**

Optimized for **sudden and volatile traffic** patterns while using a single static IP address per Availability Zone

Gateway Load Balancer (GWLB)
When you need to deploy a fleet of third-party virtual appliances that support GENEVE

Classic Load Balancer (CLB)
Layer 3,4 and 7
Intended for applications that were built within the **EC2-Classic network**
Doesn't use Target Groups
Retires on Aug 15, 2022