

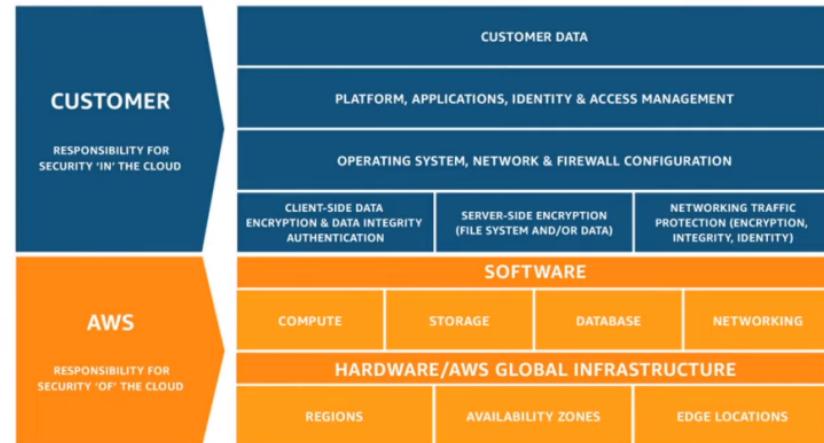
# Shared Responsibility Model

Cheat sheets, Practice Exams and Flash cards [www.exampro.co/clf-c01](http://www.exampro.co/clf-c01)

The Shared Responsibility Model is a **cloud security framework** that defines the security obligations of the customer versus the Cloud Service Provider (CSP) e.g. AWS.

Each CSP has their own variant of the Shared Responsibility Model but they are all generally the same.

## AWS Shared Responsibility Model



The **type of cloud deployment model** and/or **the scope of cloud service category** can result in specialized Shared Responsibility Models.



# AWS Shared Responsibility Model

Cheat sheets, Practice Exams and Flash cards  [www.exampro.co/clf-c01](http://www.exampro.co/clf-c01)

Customer

## Configuration of Managed Services or Third-Party Software

Platforms

Applications

Identity and Access Management (IAM)

## Configuration of Virtual Infrastructure and Systems

Operating System

Network

Firewall

## Security Configuration of Data

Client-Side Data Encryption

Server-Side Encryption

Networking Traffic Protection

Customer Data

AWS

## Software

Compute

Storage

Database

Networking

## Hardware / Global Infrastructure

Regions

Availability Zones

Edge Locations

Physical Security



# AWS Shared Responsibility Model

Cheat sheets, Practice Exams and Flash cards  [www.exampro.co/clf-c01](http://www.exampro.co/clf-c01)

Customers are responsible for Security **in** the Cloud



**IN**

Data  
Configuration



**OF**

Hardware  
Operation of Managed Services  
Global Infrastructure

AWS is responsible for Security **of** the Cloud



1

SUBSCRIBE

# Types of Cloud Computing Responsibility

Cheat sheets, Practice Exams and Flash cards  [www.exampro.co/clf-c01](http://www.exampro.co/clf-c01)

On-Premise	Infrastructure as a Service	Platform as a Service	Software as a Service
Applications	Applications	Applications	Applications
Data	Data	Data	Data
Runtime	Runtime	Runtime	Runtime
Middleware	Middleware	Middleware	Middleware
OS	OS	OS	OS
Virtualization	Virtualization	Virtualization	Virtualization
Servers	Servers	Servers	Servers
Storage	Storage	Storage	Storage
Networking	Networking	Networking	Networking

Legend:

Customer is Responsible

CSP is Responsible



# Shared Responsibility Model – Compute

Cheat sheets, Practice Exams and Flash cards  [www.exampro.co/clf-c01](http://www.exampro.co/clf-c01)

Let us take a look at **compute** as a comparison example of the Shared Responsibility Model

## Infrastructure as a Service (IaaS)



### Bare Metal

EC2 Bare Metal Instance

Customer:

- The Host OS Configuration
  - Hypervisor
- AWS
- Physical machine



### Virtual Machine

Elastic Cloud Compute (EC2)

Customer:

- The Guest OS Configuration
  - Container Runtime
- AWS
- Hypervisor, Physical machine



### Containers

AWS Elastic Container Service(ECS)

Customer:

- Configuration of containers
  - Deployment of Containers
  - Storage of containers
- AWS
- The OS, The Hypervisor, Container Runtime

## Platform as a Service (PaaS)



### Managed Platform

AWS Elastic Beanstalk

Customer:

- Uploading your code
  - Some configuration of environment
  - Deployment strategies
  - Configuration of associated services
- AWS
- Servers, OS, Networking, Storage, Security

## Software as a Service (SaaS)



### Content Collaboration

Amazon WorkDocs

Customer:

- Contents of documents
  - Management of files
  - Configuration of sharing access controls
- AWS
- Servers, OS, Networking, Storage, Security

## Function as a Service (FaaS)



### Functions

AWS Lambda

Customer:

- Upload your code
- AWS
- Deployment, Container Runtime, Networking, Storage, Security, Physical Machine, (basically everything)



# Shared Responsibility Model – Compute

Cheat sheets, Practice Exams and Flash cards  [www.exampro.co/clf-c01](http://www.exampro.co/clf-c01)



## Bare Metal

EC2 Bare Metal Instance



## Dedicated

EC2 Dedicated Instance/Host



## Virtual Machines (VM)

Elastic Compute Cloud (EC2)



## Containers

Elastic Container Service(ECS)  
Elastic Kubernetes Service (EKS)  
AWS Fargate\*



## Functions

AWS Lambda

Code

App Container

Runtime

OS

Virtualization

Customer  
Responsibility

Level of Control

AWS  
Responsibility



# Shared Responsibility Model

Cheat sheets, Practice Exams and Flash cards [www.exampro.co/clf-c01](http://www.exampro.co/clf-c01)

The **Shared Responsibility Model** is a simple visualization that helps determine what the customer is responsible for and what the CSP is responsible for related to AWS.

The customer is responsible for the data and the **configuration** of access controls that resides in AWS.

The customer is responsible for the **configuration** of cloud services and granting access to users via permissions.

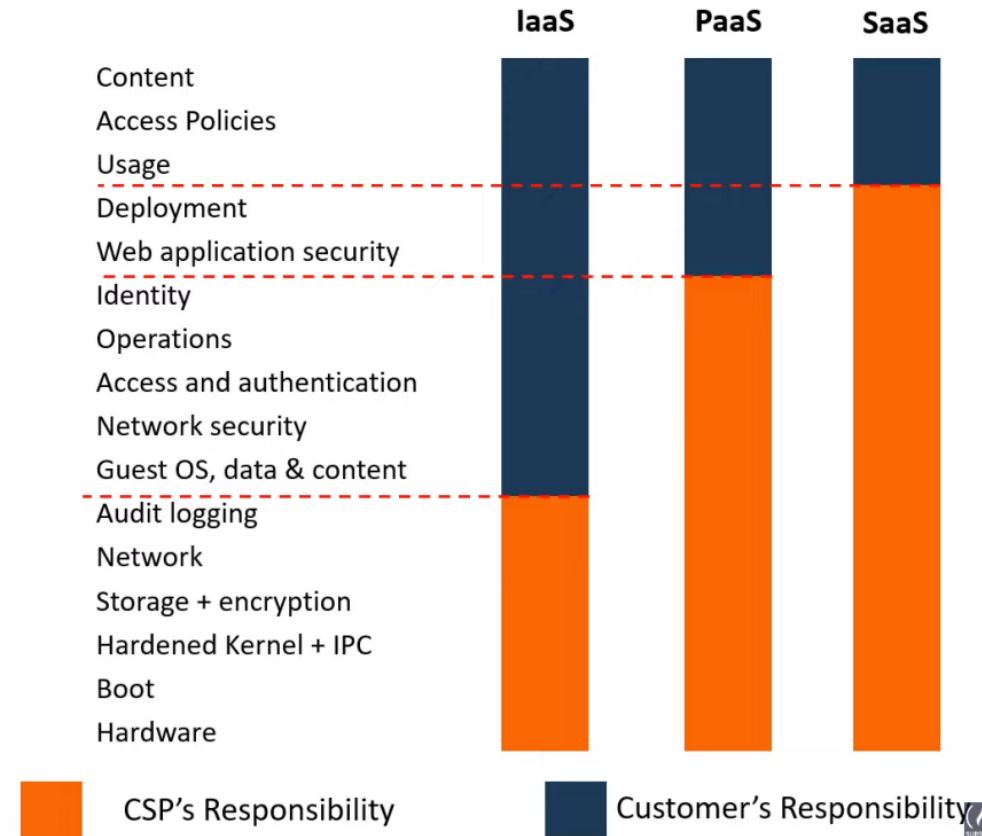
CSP is generally responsible for the underlying Infrastructure.

## Responsibility of in the cloud

If you can configure or store it then you (the customer) are responsible for it.

## Responsibility of the cloud

If you can not configure it then CSP is responsible for it



# Shared Responsibility Model - Architecture

Cheat sheets, Practice Exams and Flash cards  [www.exampro.co/clf-c01](http://www.exampro.co/clf-c01)

Less Responsibility



**Serverless / Functions**  
No more servers, just worry about data and code



**Microservices / Containers**  
Mix and match languages, better utilization of resources



**Traditional / VMs**  
Global workforce is most familiar with this kind of architecture and lots of documentation, frameworks and support.

More Responsibility

