



# LEARNING CLF-C01: AWS Certified Cloud Practitioner

## Professional

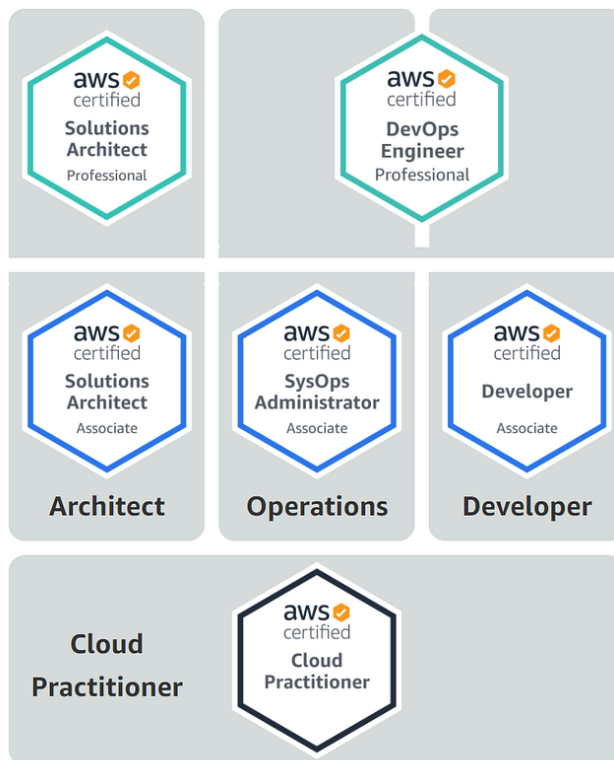
**Two years** of comprehensive experience designing, operating, and troubleshooting solutions using the AWS Cloud

## Associate

**One year** of experience solving problems and implementing solutions using the AWS Cloud

## Foundational

**Six months** of fundamental AWS Cloud and industry knowledge



## Specialty

Technical AWS Cloud experience in the Specialty domain as specified in the **exam guide**



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## Summary

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## About Project

This project aims to help students or professionals to learn the main concepts of aws-cloud-practitioner-essentials exam



## Getting Started

This is an example of how you may give instructions on setting up your project locally. To get a local copy up and running follow these simple example steps.

## Prerequisites

This is an example of how to list things you need to use the software and how to install them.

- git
- Virtual Box and extension
- Vagrant

## Installation

Clone the repo

```
git clone https://github.com/marcossilvestrini/learning-aws-cloud-practitioner-essen
```

## Usage

Use this repository for get learning about aws-cloud-practitioner-essentials exam

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## Roadmap

- ☒ Create repository
- ☒ Create examples about Exam
- ☒ Create github action for automation tasks
- ☒ Upload simulated exam

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## Course objectives

<https://explore.skillbuilder.aws/learn/course/9449/exam-prep-aws-certified-cloud-practitioner-clf-c01>

- Explain the value of the AWS Cloud
- Understand and explain the AWS shared responsibility model

## □ Light • Understand security best practices

- Understand AWS Cloud costs, economics, and billing practices
- Describe and position the core AWS services, including compute, network, databases, and storage
- Identify AWS services for common use cases



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## Course Prerequisites

We recommend that attendees of this course have the following knowledge:

- Understanding of AWS Cloud concepts
- Understanding of security and compliance within the AWS Cloud
- Understanding of the core AWS services
- Understanding of the economics of the AWS Cloud
- Course outline
- Course Introduction

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## Module 1: Cloud Concepts

Define the AWS Cloud and its value proposition

### Define the benefits of the AWS Cloud

- Explain how the AWS Cloud allows users to focus on business value
- Question walkthrough

### Identify aspects of AWS Cloud economics

- Define items that would be part of a Total Cost of Ownership (TCO) proposal
- Identify which operations will reduce costs by moving to the cloud
- Question walkthrough

### Explain the different cloud architecture design principles

- Explain the design principles

## Module 2: Security and Compliance

### Define the AWS shared responsibility model

- Recognize the elements of the shared responsibility model
- Describe the customer's responsibility on AWS
- Describe AWS responsibilities
- Question walkthrough

### Define AWS Cloud security and compliance concepts

- Identify where to find AWS compliance information
- At a high level, describe how customers achieve compliance on AWS
- Describe who enables encryption on AWS for a given service
- Recognize there are services that will aid in auditing and reporting
- Explain the concept of least privileged access
- Question walkthrough

### Identify AWS access management capabilities

- Understand the purpose of User and Identity Management
- Question walkthrough

### Identify resources for security support

- Recognize there are different network security capabilities
- Recognize there is documentation and where to find it (for example, best practices, whitepapers, official documents)
- Know that security checks are a component of AWS Trusted Advisor
- Question walkthrough

## Module 3: Technology

## Define methods of deploying and operating in the AWS Cloud



- At a high level, identify different ways of provisioning and operating in the AWS Cloud
- Identify different types of cloud deployment models
- Identify connectivity options
- Question walkthrough

## Define the AWS global infrastructure

- Describe the relationships among Regions, Availability Zones, and Edge Locations
- Describe how to achieve high availability through the use of multiple Availability Zones
- Describe when to consider the use of multiple AWS Regions
- Describe the benefits of Edge Locations at a high level
- Question walkthrough

## Identify the core AWS services

- Describe the categories of services on AWS (compute, storage, network, database)
- Identify AWS compute services
- Identify different AWS storage services
- Identify AWS networking services
- Identify different AWS database services
- Question walkthrough

## Identify resources for technology support

- Recognize there is documentation (best practices, whitepapers, AWS Knowledge Center, forums, blogs)
- Identify the various levels and scope of AWS Support
- Recognize there is the AWS Partner Network (APN) and the AWS Marketplace, including independent software vendors and system integrators
- Identify sources of AWS technical assistance and knowledge including professional services, solutions architects, training and certification, and the APN
- Identify the benefits of using AWS Trusted Advisor
- Question walkthrough

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## Module 4: Billing and Pricing

## Compare and contrast the various pricing models for AWS (for example, On-Demand Instances, Reserved Instances, and Spot Instance pricing)



- Identify scenarios or the best fit for On-Demand Instance pricing
- Identify scenarios or the best fit for Reserved Instance pricing
- Identify scenarios or the best fit for Spot Instance pricing
- Question walkthrough

## Recognize the various account structures in relation to AWS billing and pricing

- Recognize that consolidated billing is a feature of AWS Organizations
- Identify how multiple accounts aid in allocating costs across departments
- Question walkthrough

## Identify resources available for billing support

- Identify ways to get billing support and information
- Identify where to find pricing information on AWS services
- Recognize that alarms and alerts exist
- Identify how tags are used in cost allocation

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## AWS CLI

### Install

#### Windows

```
# https://learn.microsoft.com/en-us/windows/package-manager/winget/  
winget install -e --id Amazon.AWSCLI
```

#### Linux

```
cd /tmp || exit  
curl "https://awscli.amazonaws.com/awscli-exe-linux-x86_64.zip" -o "awscliv2.zip"  
unzip awscliv2.zip  
./aws/install  
rm awscliv2.zip
```

## Important Commands



```
# Get version
aws --version
```

```
# Create EC2 instance
aws ec2 run-instances \
  --image-id ami-xxxxxxx \
  --count 1 \
  --instance-type t2.micro \
  --key-name MyKeyPair \
  --security-group-ids sg-903004f8 \
  --subnet-id subnet-6e7f829e
```

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## Contributing

Contributions are what make the open source community such an amazing place to learn, inspire, and create. Any contributions you make are **greatly appreciated**.

If you have a suggestion that would make this better, please fork the repo and create a pull request. You can also simply open an issue with the tag "enhancement". Don't forget to give the project a star! Thanks again!

1. Fork the Project
2. Create your Feature Branch ( `git checkout -b feature/AmazingFeature` )
3. Commit your Changes ( `git commit -m 'Add some AmazingFeature'` )
4. Push to the Branch ( `git push origin feature/AmazingFeature` )
5. Open a Pull Request

## License

- This project is licensed under the MIT License \* see the LICENSE.md file for details

## Contact

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Project Link: <https://github.com/marcoossilvestrini/learning-aws-cloud-practitioner-essentials>

# Acknowledgments

## AWS Exams code

**Eligible Exams** ▼

The table below displays all the exams you are eligible to take.

Exam Name	Exam Code
Foundational	
AWS Certified Cloud Practitioner	CLF-C01
Associate	
AWS Certified Developer - Associate	DVA-C02
AWS Certified Solutions Architect - Associate	SAA-C03
AWS Certified SysOps Administrator - Associate	SOA-C02
Professional	
AWS Certified DevOps Engineer - Professional	DOP-C02
AWS Certified Solutions Architect - Professional	SAP-C02
Specialty	
AWS Certified Advanced Networking - Specialty	ANS-C01
AWS Certified Data Analytics - Specialty	DAS-C01
AWS Certified Database - Specialty	DBS-C01
AWS Certified Machine Learning - Specialty	MLS-C01
AWS Certified: SAP on AWS - Specialty	PAS-C01
AWS Certified Security - Specialty (retiring July 10, 2023)	SCS-C01

- AWS Glossary
- AWS Overview
- AWS Global Infrastructure
- AWS Regions and Availability Zones
- AWS Compute
- AWS Virtual Private Cloud (Amazon VPC)
- AWS Storage
- AWS Cloud Databases
- AWS Security, Identity, and Compliance
- AWS Management and Governance
- AWS Monitoring and Observability
- AWS Compliance and Auditing
- AWS Free Tier





## • AWS Pricing Calculator

- AWS EC2 pricing
- AWS S3 pricing
- AWS Cost Explorer
- AWS Support Plans
- AWS Marketplace
- AWS Knowledge
- AWS Cloud Adoption Framework
- AWS Snow Family
- Migration & Transfer on AWS
- AWS Cloud Essentials
- AWS Well-Architected
- AWS Architecture Center
- AWS Console
- Tools to Build on AWS
- AWS Training Certification
- AWS Course
- AWS Prep Course
- Simulated



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