

Part -3

AWS Certified Cloud Practitioner Certification

Amazon Lightsail

Build applications and websites fast with low-cost, pre-configured cloud resources. (**pre-configured instance**)

Create a website or application in just a few clicks.
Automatically configure networking, access, and security environments.

Amazon SageMaker

Build, train, and deploy machine learning models for any use case with fully managed infrastructure, tools, and workflows

Support saving plan

Amazon Comprehend

Derive and understand valuable insights from text within documents (classification of document)

AWS Outposts Family

Run AWS infrastructure and services on premises for a truly consistent hybrid experience

Amazon QuickSight

Unified business intelligence at hyperscale

End-users in organizations can ask questions in natural language and receive answers with relevant **visualizations**

Business analysts can create and share pixel-perfect dashboards and **visualizations** in minutes, without any client software or server infrastructure.

Amazon Application Discovery Services

Migrate Your On Premise Workloads to AWS

Amazon Simple Notification Service

Fully managed Pub/Sub service for A2A and A2P messaging

AWS Pricing Calculator (before migration)

Estimate the cost for your architecture solution.

Configure a cost estimate that fits your unique business or personal needs with AWS products and services.

AWS Organizations

Centrally manage your environment as you scale your AWS resources

AWS Organizations offers policy-based management for multiple AWS accounts. Learn how Organizations helps you more easily manage policies for groups of accounts and automate account creation.

AWS Lambda:-

Run code without thinking about servers or clusters

AWS Key Management Service (AWS KMS):-

Create and control keys used to encrypt or digitally sign your data.

AWS Key Management Service (AWS KMS) lets you create, manage, and

control cryptographic keys across your applications and AWS services.

AWS WAF

Protect your web application from common exploits

AWS WAF, you can create security rules that control bot traffic and block common attack patterns such as SQL injection or cross-site scripting (XSS).

AWS network firewall:-

Deploy network firewall security across your VPCs

Why AWS Network Firewall?

With AWS Network Firewall, you can create firewall rules that provide fine-grained control over network traffic and easily deploy firewall security across your VPCs.

AWS firewall manager:-

Centrally configure and manage firewall rules across your accounts

How it works:-

AWS Firewall Manager is a security management service that allows you to centrally configure and manage firewall rules across your accounts and applications in AWS Organizations. As new applications are created, Firewall Manager makes it easier to bring new applications and resources into compliance by enforcing a common set of security rules.

AWS Guard Duty

Protect your AWS accounts, workloads, and data with intelligent threat detection

Amazon GuardDuty combines ML and integrated threat intelligence

from AWS and leading third parties to help protect your AWS accounts, workloads, and data from threats.

AWS Trusted Advisor

AWS Trusted Advisor helps you optimize costs, increase performance, improve security and resilience, and operate at scale in the cloud. Trusted Advisor continuously evaluates your AWS environment using best practice checks across the categories of cost optimization, performance, resilience, security, operational excellence, and service limits, and recommend actions to remediate any deviations from best practices.

service limits (Service quest)

operational excellence,

resilience

security

performance,

cost optimization

Different Gateways in AWS (Simplified)

AWS API Gateway:

This is a fully managed service that makes it easy for developers to create, publish, maintain, monitor, and secure APIs at any scale. It handles all the tasks involved in accepting and processing up to hundreds of thousands of concurrent API calls.

AWS VPN Gateway:

This service provides secure connectivity between an on-premises network and AWS, using VPN connections. It supports site-to-site VPN connections and uses IPsec protocol to establish encrypted connections.

AWS Transit Gateway:

This allows you to connect your Amazon Virtual Private Clouds (VPCs) and on-premises networks through a central hub. It simplifies your network architecture by providing a single gateway to manage multiple VPC and VPN connections.

AWS Application Load Balancer:

This load balancer operates at the application layer (OSI layer 7) and routes

traffic based on the content of the request. It supports path-based routing, host-based routing, and more.

AWS Network Load Balancer:

This load balancer operates at the transport layer (OSI layer 4) and is capable of handling millions of requests per second while maintaining ultra-low latencies. It is designed for load balancing TCP, UDP, and TLS traffic.

AWS Internet Gateway:

This is a horizontally scaled, redundant, and highly available VPC component that allows communication between instances in your VPC and the internet. It provides a target in your VPC route tables for internet-routable traffic.

AWS NAT Gateway:

This service enables instances in a private subnet to connect to the internet or other AWS services but prevents the internet from initiating a connection with those instances. It provides outbound internet access for private subnets.

AWS Direct Connect:

This is a cloud service solution that makes it easy to establish a dedicated network connection from your premises to AWS. Using AWS Direct Connect, you can establish private connectivity between AWS and your data center, office, or colocation environment.

AWS sdk software dev kit

**Tools for developing and managing
applications on AWS**

Browse by Programming Language

Easily develop applications on AWS in the programming language of your choice

AWS Config

Assess, audit, and evaluate configurations of your resources

AWS Config continually assesses, audits, and evaluates the configurations and relationships of your resources on AWS, on premises, and on other clouds.

AWS Compute Optimizer

Get recommendations to optimize your use of AWS resources

Customizable rightsizing recommendations for ec2

AWS Storage Gateway

Provide on-premises applications access to cloud-backed storage without disruption to your business by maintaining user and application workflows.

AWS Batch -

AWS Batch is a fully managed batch computing service that plans, schedules, and runs your containerized batch ML, simulation,

AWS Backup

Centrally manage and automate data protection

AWS Backup is a cost-effective, fully managed, policy-based service that simplifies data protection at scale.

AWS Enterprise Support

It provides a comprehensive suite of resources, including proactive planning, advisory services, automation tools, communication channels, and 24/7 expert support. Our Support engineering team is trained in all technical domains covered by AWS, and is available to provide you with general guidance, how-to advice, best practice help, troubleshooting, and operational support. You will also get access to a Technical Account Manager (TAM) who will provide consultative architectural and operational guidance delivered in the context of your applications and use-cases to help you achieve the greatest value from AWS. Learn more about engagement with your TAM.

By utilizing these services, you can achieve your desired business outcomes in the cloud, such as improved performance, optimized costs, and increased security. Customers on AWS Enterprise Support can experience more than 15% cost-savings across select services when compared with customers with similar total AWS spend on other tiers of AWS Support. We continuously invest in proactive tools, technologies, and expertise to provide world class support for the breadth of AWS services.

Amazon FSx for Windows File Server

It provides fully managed shared storage built on Windows Server, and delivers a wide range of data access, data management, and administrative capabilities.