Overview of AWS Services

AWS Compute Services - 1

- **Amazon EC2**: Provides scalable computing capacity in the AWS cloud.
- **Amazon EC2 Auto Scaling**: Automatically adjusts the number of EC2 instances for your application based on its needs.
- **Amazon EC2 Image Builder**: An automated and secure way to build, store, and deploy machine images.
- **Amazon Lightsail**: Designed for simpler projects, offering everything needed to build an application or website, plus a cost-effective, monthly plan.
- **Amazon Linux 2023**: A Linux server designed for use in the AWS cloud.
- **AWS App Runner**: A fully managed service that makes it easy for developers to quickly deploy containerized web applications and APIs, at scale and with no prior infrastructure experience required.
- **AWS Batch**: Enables developers, scientists, and engineers to easily and efficiently run hundreds of thousands of batch computing jobs on AWS.

AWS Compute Services - 2

- **AWS Elastic Beanstalk**: An easy-to-use service for deploying and scaling web applications and services.

- **AWS Fargate**: A serverless compute engine for containers that works with both Amazon Elastic Container Service (ECS) and Amazon Elastic Kubernetes Service (EKS).

- **AWS Lambda**: Lets you run code without provisioning or managing servers.

- **AWS Serverless Application Repository**: A managed repository for serverless applications.

- **AWS Outposts**: Brings AWS services, infrastructure, and operating models to virtually any data center, co-location space, or on-premises facility.

- **AWS Wavelength**: Delivers ultra-low latency applications for mobile devices and end-users with 5G.

- **VMware Cloud on AWS**: An integrated cloud offering jointly developed by AWS and VMware delivering a highly scalable, secure and innovative service.

AWS Storage Services - 1

- **AWS Backup**: A fully managed backup service that makes it easy to centralize and automate the backup of data across AWS services.

- **Amazon Elastic Block Store (EBS)**: Provides block level storage volumes for use with EC2 instances for both throughput and transaction intensive workloads.

- **AWS Elastic Disaster Recovery**: Minimizes downtime and data loss with fast, reliable recovery of physical, virtual, and cloud-based servers into AWS.

- **Amazon Elastic File System (EFS)**: Provides a simple, scalable, fully managed elastic NFS file system for use with AWS Cloud services and on-premises resources.

- **Amazon File Cache**: A high-speed cache on AWS for on-premises file systems.

- **Amazon FSx for Lustre**: A fully managed file system that is optimized for compute-intensive workloads, like high-performance computing, machine learning, and media data processing workflows.
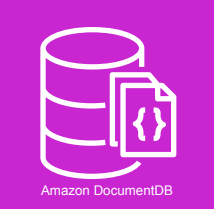
AWS Storage Services - 2

- **Amazon FSx for NetApp ONTAP**: A fully managed storage service with features, performance, and APIs of ONTAP file systems.

- **Amazon FSx for OpenZFS**: A fully managed file system built on the OpenZFS file system, optimized for high-performance workloads.

- **Amazon FSx for Windows File Server**: Provides a fully managed native Microsoft Windows file system.

- **Amazon Simple Storage Service (S3)**: Offers industry-leading scalability, data availability, security, and performance.

- **AWS Storage Gateway**: A hybrid storage service that enables your on-premises applications to seamlessly use AWS cloud storage.

AWS Database Services - 1

- **Amazon Aurora**: A MySQL and PostgreSQL-compatible relational database built for the cloud.

- **Amazon DynamoDB**: A key-value and document database that delivers single-digit millisecond performance at any scale.

- **Amazon ElastiCache**: Improves the performance of web applications by allowing you to retrieve information from fast, managed, in-memory caches.

- **Amazon Keyspaces (for Apache Cassandra)**: A scalable, highly available, and managed Apache Cassandra-compatible database service.

- **Amazon MemoryDB for Redis**: A Redis-compatible, durable, in-memory database service that delivers ultra-fast performance.

- **Amazon Neptune**: A fast, reliable, fully managed graph database service.

AWS Database Services - 2

- **Amazon Relational Database Service (RDS)**: Makes it easy to set up, operate, and scale a relational database in the cloud.

- **Amazon RDS on VMware**: Brings the RDS experience to VMware vSphere on-premises environments.

- **Amazon Quantum Ledger Database (QLDB)**: A fully managed ledger database that provides a transparent, immutable, and cryptographically verifiable transaction log.

- **Amazon Timestream**: A fast, scalable, and serverless time series database service.

- **Amazon DocumentDB (with MongoDB compatibility)**: A fast, scalable, highly available, and fully managed document database service that supports MongoDB workloads.

- **Amazon Lightsail managed databases**: Provides a simple and cost-effective option for lighter database workloads.
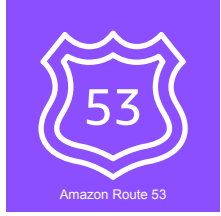
# AWS Networking and Content Delivery Services - 1

- **Amazon API Gateway**: Makes it easy for developers to create, publish, maintain, monitor, and secure APIs at any scale.

- **Amazon CloudFront**: A fast content delivery network (CDN) service that securely delivers data, videos, applications, and APIs to customers globally.

- **Amazon Route 53**: A highly available and scalable cloud Domain Name System (DNS) web service.
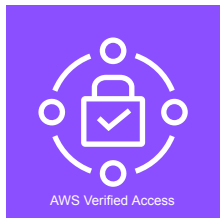
- **AWS Verified Access**: Provides secure, conditional access to your applications without a VPN.
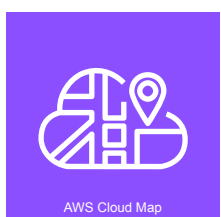
- **Amazon VPC**: Lets you provision a logically isolated section of the AWS cloud where you can launch AWS resources in a virtual network that you define.

- **Amazon VPC Lattice**: A networking service that simplifies the creation of scalable, high-performance networks in the cloud.
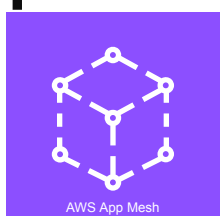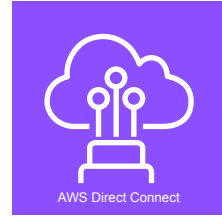
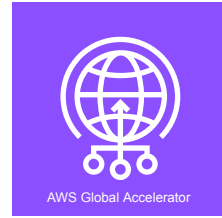- **AWS App Mesh**: Makes it easy to monitor and control microservices running on AWS.

- **AWS Cloud Map**: A cloud resource discovery service.

AWS Networking and Content Delivery Services - 2

- **AWS Direct Connect**: Makes it easy to establish a dedicated network connection from your premises to AWS.
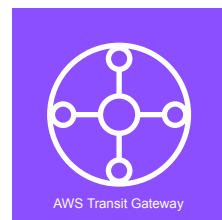
- **AWS Global Accelerator**: Improves the availability and performance of applications with local or global users.
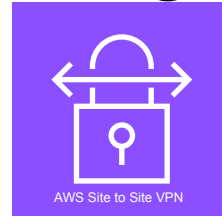
- **AWS PrivateLink**: Provides private connectivity between VPCs and AWS services, securely on the Amazon network.
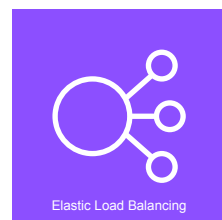
- **AWS Private 5G**: A managed service that enables you to set up and scale private 5G networks in your facilities.

- **AWS Transit Gateway**: Enables you to connect your Amazon VPCs and on-premises networks to a single gateway.
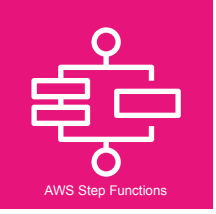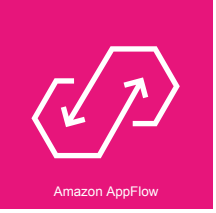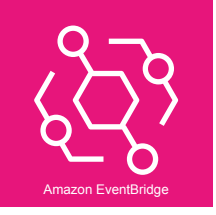
- **AWS VPN**: Establishes a secure and private tunnel from your network or device to the AWS global network.
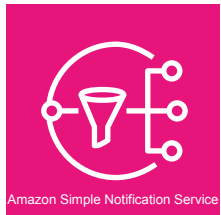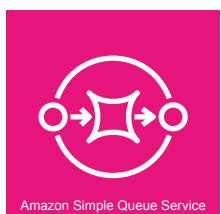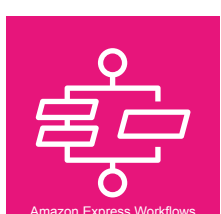
- **Elastic Load Balancing**: Automatically distributes incoming application traffic across multiple targets, such as Amazon EC2 instances, containers, and IP addresses.
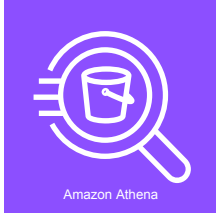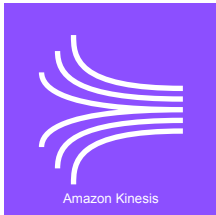
AWS Application Integration Services - 1

- **AWS Step Functions**: Coordinates multiple AWS services into serverless workflows so you can build and update apps quickly.

- **Amazon AppFlow**: Enables secure, automated data flows between AWS services and SaaS applications.

- **Amazon EventBridge**: A serverless event bus service that makes it easy to connect applications using data from your own apps, SaaS, and AWS services.

- **Amazon Managed Workflows for Apache Airflow (MWAA)**: A managed service that makes it easy to run Apache Airflow on AWS, scaling resources automatically.
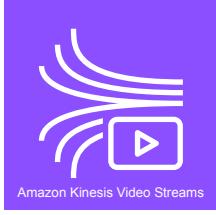
AWS Application Integration Services - 2

- **Amazon MQ**: A managed message broker service for Apache ActiveMQ and RabbitMQ that makes it easy to set up and operate message brokers on AWS.

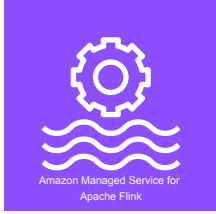- **Amazon Simple Notification Service (SNS)**: A managed service that provides message delivery from publishers to subscribers (also known as producers and consumers).

- **Amazon Simple Queue Service (SQS)**: A fully managed message queuing service that enables you to decouple and scale microservices, distributed systems, and serverless applications.

- **Amazon Simple Workflow Service (SWF)**: A web service that makes it easy to coordinate work across distributed application components.
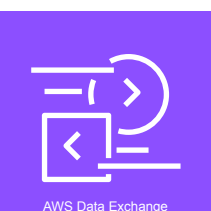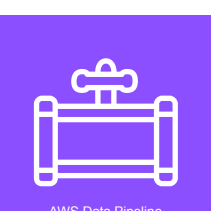
AWS Analytics Services - 1

- **Amazon Athena**: An interactive query service that makes it easy to analyze data in Amazon S3 using standard SQL.

- **Amazon CloudSearch**: A managed service in the cloud that makes it easy to set up, manage, and scale a search solution for your website.

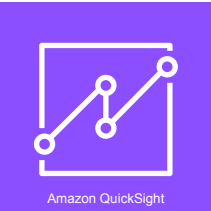- **Amazon DataZone**: A comprehensive data management and governance service to discover, catalog, share, and govern data across organizations.

- **Amazon EMR**: A cloud big data platform for processing massive amounts of data using open-source tools such as Apache Hadoop, Spark, HBase, and more.

- **Amazon FinSpace**: A data management and analytics service for financial services, providing a scalable platform to store, manage, and analyze financial data.

- **Amazon Kinesis**: A platform for streaming data on AWS, offering powerful services to make it easy to load and analyze streaming data.

AWS Analytics Services - 2

- **Amazon Data Firehose**: A service for reliably loading streaming data into data lakes, data stores, and analytics services.

- **Amazon Managed Service for Apache Flink**: A fully managed service that makes it easy to build and run applications using Apache Flink.

- **Amazon Kinesis Data Streams**: A massively scalable and durable real-time data streaming service.

- **Amazon Kinesis Video Streams**: A service that makes it easy to securely stream video from connected devices to AWS for analytics, machine learning (ML), and other processing.

- **Amazon OpenSearch Service**: An Elasticsearch-compatible service offering easy to deploy, operate, and scale Elasticsearch on the AWS Cloud.

- **Amazon OpenSearch Serverless**: A serverless option for Amazon OpenSearch Service that automatically scales resources to match the workload.
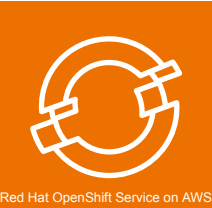
AWS Analytics Services - 3

- **Amazon Redshift**: A fast, scalable data warehouse that makes it simple and cost-effective to analyze all your data across your data warehouse and data lake.

- **Amazon Redshift Serverless**: A serverless option for Amazon Redshift that automatically manages the data warehouse capacity and scaling.

- **Amazon QuickSight**: A fast, cloud-powered business intelligence service for easy creation and sharing of dashboards.

- **AWS Clean Rooms**: A service that enables organizations to analyze and collaborate on sensitive data without revealing the underlying data.

- **AWS Data Exchange**: A service that makes it easy to find, subscribe to, and use third-party data in the cloud.

- **AWS Data Pipeline**: A web service for processing and moving data between different AWS compute and storage services.

AWS Analytics Services - 4

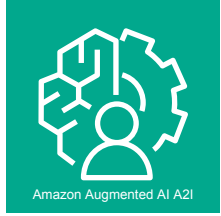- **AWS Entity Resolution**: A machine learning service that makes it easy to identify duplicate or similar entities within datasets.

- **AWS Glue**: A fully managed extract, transform, and load (ETL) service that makes it easy for customers to prepare and load their data for analytics.

- **AWS Lake Formation**: A service that makes it easy to set up a secure data lake in days.

- **Amazon Managed Streaming for Apache Kafka (Amazon MSK)**: A fully managed service that makes it easy to build and run applications that use Apache Kafka to process streaming data.
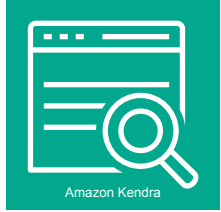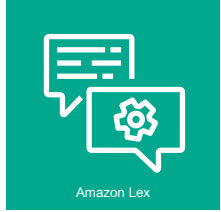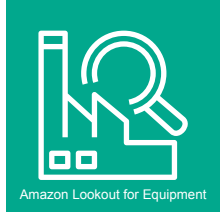
AWS Container Services

- **Amazon Elastic Container Registry (ECR)**: A fully managed Docker container registry that makes it easy for developers to store, manage, and deploy Docker container images.

- **Amazon Elastic Container Service (ECS)**: A highly scalable, fast, container management service that makes it easy to run, stop, and manage containers on a cluster.
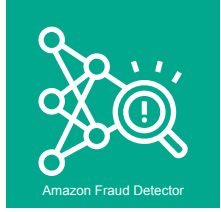
- **Amazon Elastic Kubernetes Service (EKS)**: Fully managed Kubernetes service for automating deployment, scaling, and management of containerized applications.

- **AWS App2Container**: A command-line tool for modernizing .NET and Java applications into containerized applications.

- **Red Hat OpenShift Service on AWS**: A fully managed and jointly supported service by AWS and Red Hat to run OpenShift container platform on AWS.
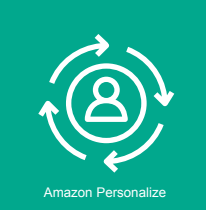
AWS ML and AI Services - 1

- **Amazon Augmented AI (A2I)**: Easily implement human review of ML predictions to improve model accuracy.

- **Amazon Bedrock**: A fully managed service to easily build, train, and deploy machine learning models at scale.

- **Amazon CodeGuru**: An automated code review service that uses machine learning to identify critical issues, security vulnerabilities, and hard-to-find bugs during application development.

- **Amazon CodeWhisperer**: AI-powered service that helps improve developer productivity by providing code recommendations.

- **Amazon Comprehend**: Natural Language Processing (NLP) service to uncover insights and relationships in text.

- **Amazon DevOps Guru**: An ML-driven service that makes it easier to improve application availability by automatically detecting operational issues.
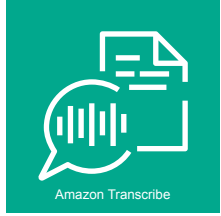
AWS ML and AI Services - 2

- **Amazon Forecast**: Uses machine learning to deliver highly accurate forecasts based on the same technology used at Amazon.com.

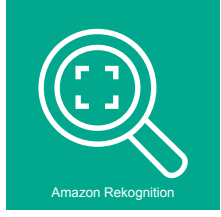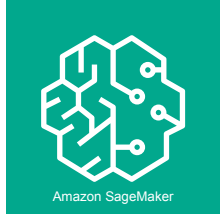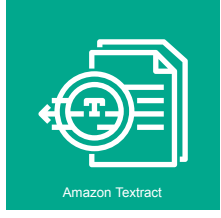- **Amazon Fraud Detector**: Identifies potentially fraudulent online activities, such as online payment fraud and fake accounts, using machine learning.

- **Amazon Comprehend Medical**: Uses machine learning to extract relevant medical information from unstructured text.

- **Amazon Kendra**: An intelligent search service powered by machine learning, making it easy to find the information you need within the vast amount of data.

- **Amazon Lex**: Builds conversational interfaces into any application using voice and text.

- **Amazon Lookout for Equipment**: Uses machine learning to identify abnormal equipment behavior so you can take action before machine failures occur.
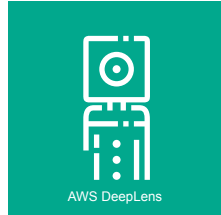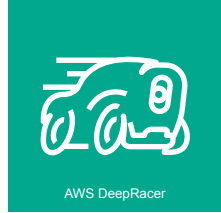
AWS ML and AI Services - 3

- **Amazon Lookout for Metrics**: Uses machine learning to detect anomalies in your business and operational data.
- **Amazon Lookout for Vision**: Uses machine learning to identify defects in industrial products, ensuring product quality.
- **Amazon Monitron**: An end-to-end system that uses machine learning to detect abnormal behavior in industrial machinery.
- **Amazon Personalize**: Provides a personalized user experience for applications using machine learning technology perfected from years of use on Amazon.com.
- **Amazon Polly**: Turns text into lifelike speech, allowing you to create applications that talk.

AWS ML and AI Services - 4

- **Amazon Rekognition**: Makes it easy to add image and video analysis to your applications.

- **Amazon SageMaker**: A fully managed service that provides every developer and data scientist with the ability to build, train, and deploy machine learning models quickly.

- **Amazon Textract**: Automatically extracts text and data from scanned documents.

- **Amazon Transcribe**: Automatic speech recognition service to add speech-to-text capability to applications.

- **Amazon Translate**: Natural and fluent language translation service to localize content for international users.

- **AWS DeepComposer**: A machine learning-powered musical keyboard for developers to get hands-on with generative AI.

AWS ML and AI Services - 5

- **AWS DeepLens**: The world's first deep learning-enabled video camera for developers.
- **AWS DeepRacer**: A fully autonomous 1/18th scale race car driven by reinforcement learning, 3D racing simulator.
- **AWS HealthLake**: Transforms health data with machine learning, making it easy to store, transform, and analyze health data in the cloud.
- **AWS HealthScribe**: Empowers healthcare providers to easily create accurate medical notes through automated, real-time medical transcription.
- **AWS Panorama**: A machine learning appliance and SDK that bring computer vision to on-premises cameras.

Thanks for Watching