

AWS Service Categories:

① Compute: Instances, Containers & Serverless Computing.

* Amazon EC2: Secure and Resizable Compute Capacity for virtually any workload.

Use Cases:

- ⇒ Run cloud-native & enterprise Applications.
- ⇒ Scale for HPC Applications.
- ⇒ Develop for Apple Platforms.
- ⇒ Train & develop ML Applications.

* Amazon EC2 Auto Scaling: Add or remove Compute Capacity to meet changing demand.

Use Cases:

- ⇒ Schedule Applications Scaling.
- ⇒ Reduce manual Provisioning.
- ⇒ Anticipate Changes with Machine Learning.

* Amazon Lightsail: Build Applications & Websites fast with low-Cost, Pre-Configured Cloud Resources.

Use Cases:

- ⇒ Launch Simple Web Applications.
- ⇒ Create Custom Websites.
- ⇒ Build Small business Applications.
- ⇒ Spin up test Environments.

* Aws App Runner: Deploy Containerized Web Applications and APIs at Scale.

Use Cases:-

- ⇒ Build Frontend and backend Applications.
- ⇒ Run thousands of microservices Simultaneously.
- ⇒ Improve your time to market.

* Aws Batch: Batch Processing, ML model training, and analysis at any scale.

Use Cases:-

- ⇒ Run financial Services Analyses.
- ⇒ Screen for drugs & Sequence genomes.
- ⇒ Render visual effects.
- ⇒ Train ML models.

* Aws Elastic Beanstalk: Deploy & Scale Web Application

Use Cases:-

- ⇒ Quickly Launch Web Applications.
- ⇒ Create mobile API backends for your Applications.
- ⇒ Replatform Critical business Applications.

* Aws Lambda: Run Code without thinking about Servers or Clusters.

Use Cases:-

- ⇒ Process data at Scale.
- ⇒ Run interactive web & mobile backends.

- ⇒ Enable Powerful ML insights.
- ⇒ Create event-driven Applications.
- * Aws Local Zones: Run latency Sensitive Applications closer to end users.

Use Cases :-

- ⇒ Run low-latency Applications at the edge.
- ⇒ Simplify hybrid cloud migrations.
- ⇒ Meet stringent data residency Requirements.
- * Aws Outposts Family: Run Aws infrastructure & Services on Premises for a truly Consistent hybrid Experience.

Use Cases :-

- ⇒ Low Latency Compute.
- ⇒ Data Residency.
- ⇒ Migration & Modernization.
- ⇒ Local data Processing.

- * Aws Serverless Applications Repository: Discover, deploy, & Publish Serverless Applications.

Benefits :-

- ⇒ Deploy more Powerful Apps.
- ⇒ Easily Manage Applications.
- ⇒ Reuse, Don't Rebuild.
- ⇒ Ensure Best Practices.

* Aws SimSpace Weaver : Build dynamic, large-scale
Spatial Simulations on Aws managed infrastructure.

Use Cases :

⇒ Simulate Large-Scale Clouds.

⇒ Recreate City-Scale Environments.

⇒ Create Immersive, interactive Experiences.

* Aws Snow Family : Move Petabytes of data to & from Aws, or Process data at the edge.

Key Features :

⇒ Simple management & Monitoring.

⇒ NFS endpoint.

⇒ On-board Computing.

⇒ Encryption.

⇒ Anti-tamper & Tamper-evident.

⇒ End-to-end Tracking.

⇒ Secure erasure.

* Aws Wavelength : Deliver ultra-low-latency Applications for 5G devices.

Use Cases :

⇒ Build media & Entertainment Applications.

⇒ Accelerate ML inference at the edge.

⇒ Develop Connected Vehicle Applications.

* **VMware Cloud on AWS**: The fastest, safest path for all your VMware workloads.

Use Cases:

- ⇒ Extend your data center.
- ⇒ Simplify Disaster Recovery Solutions.
- ⇒ Migrate & Scale rapidly to the cloud.
- ⇒ Build next-generation Applications.

② **Containers**: Run your containers in the most secure, reliable & scalable environment.

Use Cases:

- ⇒ Build secure microservices.
 - ⇒ Move from idea to market, faster.
 - ⇒ Choose the right compute & container orchestrator for your needs.
 - ⇒ Integrate across AWS with high reliability.
- * **Amazon Elastic Container Registry**: Easily store, share & deploy your containers software anywhere.
- Use Cases:
- ⇒ Manage software vulnerabilities.
 - ⇒ Streamline your deployment workloads.
 - ⇒ Manage image lifecycle policies.
 - ⇒ **Amazon ECS**: Run highly secure, reliable & scalable containers.

Use Cases:

- ⇒ Modernize Applications.
- ⇒ Automatically Scale Web Applications.
- ⇒ Support batch processing.
- ⇒ Train NLP & AI / ML models.
- * Amazon ECS Anywhere: Run Containers on your On-Premises infrastructure.

Use Cases:

- ⇒ Deploy data Processing Workloads at the Edge.
- ⇒ Use existing Capital investments.
- ⇒ Deploy GPU-based Container Workload.
- ⇒ Run Windows Container Workload.

- * Amazon Elastic Kubernetes Services (EKS): The most trusted Way to Start, run & Scale Kubernetes.

Use Cases:

- ⇒ Deploy across hybrid Environments.
- ⇒ Model machine learning (ML) Workflows.
- ⇒ Build & Run Web Applications.

- * Amazon EKS Anywhere: Create & Operate Kubernetes Clusters on your own infrastructure.

Use Cases:

- ⇒ Maintain data Sovereignty.
- ⇒ Accelerate & Simplify migration to AWS.
- ⇒ Secure Applications in disconnected Environments.
- ⇒ Streamline Maintenance to save time.

* Amazon EKS Distro: An Open-Source distribution of Kubernetes from AWS.

Use Cases:

⇒ Deploy Consistently on premises & in the Cloud.

⇒ Modernize On-Premises Applications.

⇒ Use Existing hardware environments.

* Aws APP2 Container: Containerize and migrate existing Applications.

Use Cases:

⇒ Maintain Legacy Applications & achieve Cost benefits.

⇒ Automate Applications Provisioning.

⇒ Build & deploy Containers.

* Aws APP Runner: Deploy Containerized Web Applications & APIs at Scale.

Use Cases:

⇒ Build frontend & backend Applications.

⇒ Run thousands of microservices Simultaneously.

⇒ Improve Your time to Market.

* Aws Copilot: Command line interface for Containerized Applications.

Use Cases:

⇒ Deploy Containerized Applications.

⇒ Move faster with a Stable, Secure Foundation.

⇒ Support your Expanding Business needs.

⇒ Monitor & Troubleshoot your Services.
* AWS Fargate: Serverless Compute for Containers.

Use Cases:-

- ⇒ Web Apps, APIs, & microservices.
- ⇒ Run & scale Container Workloads.
- ⇒ Support AI & ML training Applications.
- ⇒ Optimize Costs.

* Red Hat OpenShift Service on AWS: Managed OpenShift integration on the Cloud.

Use Cases:-

- ⇒ Create a Central Application Environment.
- ⇒ Accelerate application delivery.
- ⇒ Modernize Existing Applications.

③ Management & Governance on AWS: Business agility & governance control.

Use Cases:-

- ⇒ Scale.
- ⇒ Simplicity
- ⇒ Third-Party Solutions.
- ⇒ Cost Savings.

* Amazon CloudWatch: Observe & monitor Resources of Applications on AWS, On Premises, & on Other Clouds.

Use Cases:-

- ⇒ Monitor Application Performance.
- ⇒ Perform root cause analysis.

- => Optimize Resources Proactively.
- => Test Website Impacts
- * Amazon Managed Grafana: Scalable & Secure data visualization for your operational metrics, logs, & traces.
 - Use Cases:-
 - => Verify your Observability.
 - => Monitor Containers.
 - => Troubleshoot operational issues Collaboratively.
 - => Monitor IoT devices.
- * Amazon Managed Service for Prometheus: Highly available secure, & managed monitoring for your containerized systems.
 - Use Cases:-
 - => Unified System Monitoring.
 - => Troubleshooting & root cause analysis.
 - => Workload & Application metrics monitoring.
 - => High - cardinality metrics monitoring.
- * AWS Auto Scaling: Application Scaling to Optimize Performance & Costs.
 - Benefits:-
 - => Setup Scaling quickly.
 - => Make smart scaling decisions.
 - => Automatically maintain performance.
 - => Pay only for what you need.

* Aws Chatbot: Monitor, Operate, & troubleshoot your Aws Resources with interactive Chatops.

Use Cases:

- ⇒ Quickly discover & act on Cost anomalies.
- ⇒ Remediate Security findings from Aws Security Hub.
- ⇒ Improve incident management response times.
- ⇒ Give Devops teams visibility into Application events.

* Aws Cloudformation: Set up Cloud Provisioning with infrastructure as Code.

Use Cases:

- ⇒ Manage infrastructure with Devops.
- ⇒ Scale Production Stacks.
- ⇒ Share best Practices.

* Aws CloudTrail: Track user activity & API usage.

Use Cases:

- ⇒ Audit activity.
- ⇒ Identify security incidents.
- ⇒ Troubleshoot operational issues.

* Aws Command Line Interface: Unified tool to manage Aws Services.

Usage:

- ⇒ Installing & Configuring the tool.

* Aws Compute Optimizer: Get recommendations to optimize your use of Aws Resources.

Use Cases:-

- ⇒ Evaluate Right sizing Recommendations.
- ⇒ Configure enhanced infrastructure metrics.
- ⇒ Streamline migration to Aws Graviton CPUs.
- ⇒ Configure external metrics.

* Aws Config: Assess, audit, & evaluate configurations of your Resources.

Use Cases:-

- ⇒ Streamline Operational troubleshooting & change management.
- ⇒ Deploy a Compliance - as- Code framework.
- ⇒ Continually audit - Security monitoring & analysis.
- * Aws Control Tower: Set up & govern a secure, multi-account Aws Environment.
- Use Cases:-
- ⇒ Quickly deploy Applications.
- ⇒ Provision Compliant Aws accounts.
- ⇒ Deploy data residency Controls.
- ⇒ Increase agility without Compromising Security.

* Aws Console Mobile Application: Stay Connected to your Aws resources on-the-go.

Usage:

- ⇒ Monitor Resources through a dedicated dashboard.

- ⇒ View Configuration details
- ⇒ Alarms for Select AWS Services.
- * AWS Distro for Open Telemetry :- Secure, Production-ready, Open-Source distribution with reliable Performance.

Use Cases:-

- ⇒ Collect & Send metrics & traces.
- ⇒ Automate trace Collection.
- ⇒ Collect metadata on Application Resources.
- ⇒ Integrate with Amazon CloudWatch.
- * AWS Health Dashboard :- View imp events & changes affecting your AWS Environment.

Benefits:-

- ⇒ Personalized view of Service health.
- ⇒ Proactive notifications.
- ⇒ Detailed troubleshooting guidance.
- ⇒ Integration & automation.
- ⇒ Fine-grained access Control by using IAM.
- ⇒ Aggregate health events across AWS Organizations.

- * AWS Launch Wizard :- Easily Size, Configure, & deploy third-party applications on AWS.

Benefits:-

- ⇒ Simplify Application deployment.
- ⇒ Automate AWS Resources Selection & Cost estimation

- => Save time with repeatable Code templates.
- => Leverage Proven deployment best-practices from AWS.
- * AWS License Manager: Manage your Software licensed & fine-tune licensing costs.

Use Cases:

- => Streamline license management.
- => Simplify the Windows BYOL Experience.
- => Control AWS Marketplace license entitlements.
- => Manage user-based license subscriptions.

- * AWS Management Console: Everything you need to access & manage the AWS cloud - in one web interface.

Benefits:

- => AWS free training
- => AWS Certification Resources.
- => AWS free - Digital training.
- => Amazon Sage maker Saving Plans.
- => Amazon DocumentDB
- => AWS Lambda Container Image Support
- => Amazon Lightsail Extended Free Tier.
- * AWS Managed Services: Operational Excellence in the Cloud.

- Usage:
- => Security.

- ⇒ Incident management.
- ⇒ Automation.
- ⇒ Cost Savings.
- ⇒ AWS Expertise.

Benefits:

- ⇒ Security
- ⇒ Availability
- ⇒ Efficiency
- ⇒ Resiliency
- ⇒ Compliance.

* AWS OpsWorks : Automate Operations with Chef & Puppet.

Use Case:

- ⇒ Managed Instances of Chef & Puppet.
- ⇒ Use Code to automate the Configurations of your Servers.
- * AWS Organizations : Centrally manage your Environment as you Scale your AWS Resources.

Use Case:

- ⇒ Automate AWS account Creation.
- ⇒ Enable Proactive Protection with dedicated Security group
- ⇒ Ensure User access to designated Resources.
- ⇒ Share Common Resources across accounts.
- * AWS Proton : Increase your impact with Self-Service infrastructure templates & Provisioning automation.

Use Case:

- ⇒ Implement Self-Service Infrastructure Portals.

- ⇒ Accelerate modern applications deployments.
- ⇒ Track Versions & updates in a Centralized Solution.
- ⇒ Empower developers with flexibility.
- * Aws Resilience Hub: Prepare & Protect your applications from disruptions.

Use Cases:

- ⇒ Uncover Potential Weaknesses.
- ⇒ Protect mission - Critical Applications.
- ⇒ Help meet Contractual & Regulatory Requirements.

- * Aws Service Catalog: Create, Share, Organize, & govern your Curated IaC templates.

Use Cases:

- ⇒ Automate access to ML notebooks.
- ⇒ Apply access Controls.
- ⇒ Provision Resources for Aws Accounts.
- ⇒ Accelerate Provisioning of CI/CD Pipelines.
- * Aws Service Management Connector: Provision, Manage & Operate Aws Resources Within Service Management Tools.

Use Cases:

- ⇒ Enable Self - Service to Request Aws Resources.
- ⇒ View Aws Resources data & Compliance Status
- ⇒ Remediate Security incidents.
- ⇒ Detect & respond to Operational issues.

* Aws Systems Manager : Manage your Resources on Aws & in multicloud & hybrid environments.

Use Cases :

- ⇒ Centralize Operational data.
- ⇒ Automatically Resolve Application issues.
- ⇒ Simplify Resource Management.
- ⇒ Remediate Security Events.

* Aws Telco Network Builder : Automate the deployment & management of your telco networks on Aws.

Use Cases :

- ⇒ Build a cloud-based telco network.
- ⇒ Streamline network updates across cloud infrastructure.
- ⇒ Expand your telco network into new Regions.

* Aws Trusted Advisor : Reduce Costs, improve Performance, Improve Security.

Benefits :

- ⇒ Cost Optimization
- ⇒ Performance
- ⇒ Security

⇒ Fault Tolerance & Service quotas.

* Aws Well-Architected Tool : Learn best Practices & apply imp design Considerations.

Use Cases :

- ⇒ Workload Sharing & Collaboration.
- ⇒ Tailor guidance with Custom lenses.

⇒ Realize Sustainability goals.

④ Data Base: Modernize your data infrastructure with fully managed, Purpose-built Database Benefits:

- ⇒ Choose the right-purpose-built Engine.
- ⇒ Run fully managed database.
- ⇒ Achieve Performance at Scale.
- ⇒ Rely on high availability & security.

* Amazon Aurora: Unparalleled high Performance & availability at global Scale with full MySQL & PostgreSQL Compatibility.

Use Cases:

- ⇒ Modernize Enterprise Applications.
- ⇒ Build SaaS Applications.
- ⇒ Deploy globally distributed Applications.
- ⇒ Go Serverless.

* Amazon Aurora Serverless V2: Instantly Scale to > 10,000 transactions Per Second.

Use Cases:

- ⇒ Variable Workloads ⇒ Scaled-Out DB Split across multiple servers.
- ⇒ Unpredictable Workloads ⇒ Enterprise D.B fleet management
- ⇒ Software as a Service Application.

* **Amazon DocumentDB** :- Scale Enterprise Workloads with ease using a fully managed native JSON document D.B.

Use Cases:

⇒ Store & query Content Management data.

⇒ Manage user Profiles, Preferences, & Requests.

⇒ Scale mobile & Web Applications.

* **Amazon DynamoDB** :- fast flexible ~~Nosql~~ - NoSQL DB Service for Single-digit millisecond Performance at any Scale.

Use Cases:

⇒ Develop Software Applications.

⇒ Create media metadata Stores.

⇒ Deliver Seamless Retail Experiences.

⇒ Scale Gaming Platforms.

* **Amazon ElastiCache** :- Real time Performance for real-time Applications.

Use Cases:

⇒ Lower total Cost of Ownership.

⇒ Real-time application Data Caching.

⇒ Real-time Session Stores.

⇒ Real-time leaderboards.

* **Amazon Keyspace** :- A Scalable, highly available, & managed Apache Cassandra - Compatible D.B Service.

Use Cases:

⇒ Build Applications that require low latency.

Build " using Open-Source technologies.

- ⇒ Move your Cassandra Workloads to the Cloud.
- ⇒ Data Store for Applications.

* Amazon MemoryDB for Redis - Redis - Compatible, durable, in-memory D.B Service for ultra-fast performance.

Use Cases:

⇒ Build Web & mobile Applications.

⇒ Quickly access Customer data for retail.

⇒ Develop Online Games.

⇒ Stream media & Entertainment.

* Amazon Neptune : Serverless Graph D.B designed for Superior Scalability & availability.

Use Cases:

⇒ Transform Personalization with Customer 360.

⇒ Detect Fraud Patterns.

⇒ Unleash machine learning Predictions.

⇒ Improve IT Security.

* Amazon Quantum Ledger D.B : Maintain an immutable, Cryptographically Verifiable log of Data changes.

Use Cases:

⇒ Store financial transactions.

⇒ Reconcile Supply chain Systems.

⇒ Maintain Claims history.

⇒ Centralize digital Records.

* Amazon RDS : Set up, operate & scale a Relational D.B in the cloud with just a few clicks.

Use Cases:

- ⇒ Build web & mobile Applications.
- ⇒ Move to managed D.B.
- ⇒ Break free from legacy D.B.
 - * Amazon RDS on Outposts :- Deploy Amazon RDS managed D.B in On-Premises Environments.
- Benefits :-
 - ⇒ Fully managed, On-Premises D.B.
 - ⇒ High Scalable & Performant.
 - ⇒ Available & durable.
 - ⇒ Unified interface.

- * Amazon Redshift :- Best Price-Performance for Cloud data warehousing.

Improve financial & demand forecasts.

Collaborate & share data.

Optimize your business intelligence.

Increase developer productivity.

- * Amazon Timestream :- fast, Scalable & Serverless time-series D.B.

Use Cases:

- ⇒ IoT applications.
- ⇒ DevOps applications.
- ⇒ Analytics Applications.
- * AWS Database Migration Service :- Trusted by customers globally to securely migrate 800,000+ DB with minimal downtime.

Use Cases:

- ⇒ Move to managed DB.
- ⇒ Remove licensing costs & accelerate business growth.
- ⇒ Replicate ongoing changes.
- ⇒ Improve integration with Data Lakes.

⑤ Networking & Content Delivery in AWS: Run every workload on a secure & reliable global network.

Use Cases:

- ⇒ Build strong network foundations.
- ⇒ Connect hybrid infrastructure.
- ⇒ Deliver faster, more secure applications with edge networking.
- * Amazon Virtual Private Cloud: Define & launch AWS Resources in a logically isolated virtual network.

Use Cases:

- ⇒ Launch a simple website or blog.
- ⇒ Host multi-tier web applications.
- ⇒ Create hybrid connections.
- * Amazon VPC Lattice: Simplify service-to-service connectivity security, & monitoring.

Use Cases:

- ⇒ Simplify service-to-service connectivity at scale.
- ⇒ Enhance application-layer security.
- ⇒ Implement advanced traffic management.
- ⇒ Gain visibility into service-to-service interactions.

* Amazon API Gateway: Create, maintain, & Secure APIs at any scale.

Benefits:

- ⇒ Efficient API development. ⇒ Easy monitoring.
- ⇒ Performance at any scale. ⇒ Flexible Security Controls.
- ⇒ Cost Savings at Scale. ⇒ Restful API Options

* Amazon CloudFront: Securely deliver Content with low latency & high transfer speeds.

Use Cases:

- ⇒ Deliver fast, secure websites.

- ⇒ Accelerate dynamic Content delivery & APIs.
- ⇒ Stream live & on-demand video.
- ⇒ Distribute patches & updates.

* Amazon Route 53: A reliable & cost-effective way to route & end users to your internet Applications

Use Cases:

- ⇒ Manage network traffic globally.
- ⇒ Build highly available Applications.
- ⇒ Set up private DNS.

* Aws APP Mesh: Application-level networking for all your services.

* Aws Cloud Map: Service discovery for cloud resources.

Use Cases:

- ⇒ Service discovery
- ⇒ Continuous integration & delivery
- ⇒ Automated health monitoring

- * Aws Cloud WAN :- Build, manage & monitor global wide area networks.

Use Cases:

⇒ Build a global network

⇒ Connect cloud & on-premises environments.

⇒ Visualize & control your network.

- * Aws Direct Connect :- Create a dedicated network connection to Aws.

Use Cases:

⇒ Build hybrid networks.

⇒ Extend your existing network.

- * Aws Global Accelerator :- Improve Applications availability, Performance & Security using the Aws global network.

Use Cases:

⇒ Global Traffic Manager.

⇒ API acceleration.

⇒ Global static IP.

⇒ Low - latency gaming & media workloads.

- * Aws Private 5G :- Deploy, manage, & scale a private mobile network.

Use Cases:

⇒ Run a smart manufacturing facility.
 ⇒ Enable secure applications at physical facilities.
 ⇒ Deliver reliable Campus Connectivity.
 ⇒ Enable worker productivity applications.

* AWS PrivateLink: Establish Connectivity b/w VPCs & AWS Services without exposing data to the internet.

Use Cases:

⇒ Securely access AWS Services. ⇒ Migrate to a hybrid cloud.

⇒ Maintain regulatory Compliance. ⇒ Deliver SaaS Services on APN

* AWS Transit Gateway: Connect Amazon VPCs, AWS accounts, & on-premises networks to a single gateway.

Use Cases:

⇒ Deliver Applications around the world. ⇒ Smoothly respond to spikes in demand.
⇒ Rapidly move to global scale ⇒ Host multicast applications on AWS.

* AWS Verified Access: Provide Secure access to Corporate Applications without a VPN.

Use Cases:

⇒ Secure distributed users.

⇒ Manage Corporate Application Access.

* AWS VPN: Connect your On-Premises networks & remote workers to the cloud.

Use Cases:

⇒ Quickly Scale remote access

⇒ Integrate with your mobile Authentication Systems.
⇒ Control your application migrations.

⇒ Secure Communication b/w remote locations.

* AWS Elastic Load Balancing: Distribute network traffic to improve application scalability.

Use Cases :-

- ⇒ Modernize applications with Serverless & Containers.
- ⇒ Improve hybrid cloud network Scalability.
- ⇒ Retain your existing network appliances.

⑥ Security, Identity, & Compliance on AWS :- Secure your Workloads & applications in the cloud.

Use Cases :-

- ⇒ Identity & Access Management
- ⇒ Data Protection

⇒ Network & application protection.

- * AWS Identity & Access Management (IAM) :- Securely manage identities & access to AWS Services & Resources.

Use Cases :-

- ⇒ Apply fine-grained permissions & scale with attribute-based access control.

- ⇒ Manage per-account access across AWS accounts & applications.
- ⇒ Establish organization-wide & preventative guardrails on AWS.
- ⇒ Set - Verify, & right-size permissions toward least privilege.

- * Amazon Cognito :- Implement secure, frictionless Customer identity & access management that scales.

Use Cases :-

- ⇒ Engage customers with flexible authentication.
- ⇒ Manage B2B identities.
- ⇒ Secure machine-to-machine Authentication.

- ⇒ Get Role-based access to AWS Resources.
- * Amazon Detective: Analyze & Visualize Security data to investigate potential security issues.
 - Use Cases:
 - ⇒ Triage Security findings. ⇒ Track down threats.
 - ⇒ Investigate incidents.
- * Amazon GuardDuty: Protect your AWS accounts with intelligent threat detection.
 - Use Cases:
 - ⇒ Improve security operations visibility.
 - ⇒ Assist analysts in investigations & automate remediation.
 - ⇒ Identify files containing malware.
 - ⇒ Detect & mitigate threats in your container environment.
- * Amazon Inspector: Automated & continual vulnerability management at scale.
 - Use Cases:
 - ⇒ Quickly discover vulnerabilities in compute workloads.
 - ⇒ Prioritize patch remediation.
 - ⇒ Meet compliance requirements.
 - ⇒ Identify zero-day vulnerabilities sooner.
- * Amazon Macie: Discover & protect your sensitive data at scale.
 - Use Cases:
 - ⇒ Strengthen your data security posture.
 - ⇒ Discover sensitive data for compliance.
 - ⇒ Protect sensitive data during migration.
 - ⇒ Increase visibility for business-critical data.

* Amazon Security Lake (Preview): Automatically Centralize your Security data in a few steps.

Use Cases:

- ⇒ Analyze multiple years of security data quickly.
- ⇒ Support on-demand analysis of petabytes-scale data.
- ⇒ Examine your data with custom analytics.
- ⇒ Use your predefined preferred tools with centralized data.

* Amazon Verified Permissions (Preview): Manage fine-grained permissions & authorization within custom applications.

Use Cases:

- ⇒ Define a fine-grained Authorization model.
- ⇒ Grant fine-grained permissions within Applications.
- ⇒ Audit permissions across applications.
- ⇒ Centralize the Policy administration system.

* Aws Artifact: Access AWS & ISV security & compliance reports.

Use Cases:

- ⇒ Understand AWS security & compliance posture.
- ⇒ Manage select online agreements at scale.
- ⇒ Assess third-party security & compliance.

* Aws Audit Manager: Continually audit your AWS usage to simplify risk & compliance assessment.

Use Cases:

- ⇒ Transition from manual to automated evidence collection.
- ⇒ Continually audit to assess compliance.
- ⇒ Deploy internal risk assessments.

* Aws Certificate Manager: Provision & manage SSL/TLS certificates with AWS Services & Connected Resources.

Use Cases:

- ⇒ Protect & Secure your website.
- ⇒ Protect your internal Resources.
- ⇒ Improve uptime.

* Aws CloudHSM: Manage single-tenant hardware security modules (HSMs) on AWS.

Use Cases:

- ⇒ Encrypt data at rest.
- ⇒ Offload SSL Processing for Web Servers.
- ⇒ Activate TDE for Oracle DB.

* Aws Directory Service: Gain efficiency with a fully managed Microsoft Active Directory Service.

Use Cases:

- ⇒ Simplify administration with a managed Service.
- ⇒ Migrate directory aware workloads.
- ⇒ Integrate your On-Premises Credentials.
- ⇒ Scale your directory globally.

* Aws Firewall Manager: Centrally Configure & manage firewall rules across your accounts.

Use Cases:

- ⇒ Protect applications hosted on EC2 instances.
- ⇒ Deploy tools at scale to protect data.
- ⇒ Continually audit Resources.

* AWS Key Management Service (AWS KMS): Create & Control Keys used to Encrypt or digitally Sign your data.
use Cases:
⇒ Protect your data at rest. ⇒ Sign & verify digital signatures.
⇒ Encrypt & decrypt data. ⇒ Validate JSON web token using HMAC.

* AWS Network Firewall: Deploy network firewall security across your VPCs.
use Cases:
⇒ Inspect inbound internet traffic.
⇒ Filter Outbound traffic. Internal traffic
⇒ Prevent Private inbound traffic intrusion.
⇒ Secure AWS Direct Connect & VPN traffic.

* AWS Private Certificate Authority: Create Private Certificates to identify Resources & Protect Data.
use Cases:

⇒ Automate & Scale Certificate issuance.
⇒ Establish secure TLS for Kubernetes.
⇒ Use TLS & mutual TLS for private networks
⇒ Create Secure Service meshes.

* AWS Resource Access Manager: Simplify & Securely share your AWS Resources across multiple accounts.
use Cases:
⇒ Share accounts in multiple account environment.
⇒ Centrally govern access to Resources.
⇒ Least privilege on Shared Resources.

* Aws Secrets Manager: Centrally Manage the lifecycle of Secrets.

Use Cases:

- ⇒ Store Secrets Securely ⇒ Monitor Secrets Usage
- ⇒ Manage access with fine-grained Policies.
- ⇒ Automate Secrets Rotation.

* Aws Security Hub: Automate Aws Security checks & Centralize Security alerts.

Use Cases:

- ⇒ Conduct Cloud Security Posture management.
- ⇒ Initiate Security Orchestration.
- ⇒ Automation & Response Workflow Save money & time by Simplifying integrations.
- ⇒ Correlate your Security findings to discover new insights.

* Aws Shield: Maximize Applications availability & Resilience with managed DDoS Protection.

Use Cases:

- ⇒ Automatically scrub bad traffic at Specific Layers.
- ⇒ Minimize Application downtime & latency.
- ⇒ Monitor & Protect up to 1000 Resources types.

* Aws IAM Identity Center (Successor to Aws single sign-on):
Centrally manage workforce access to multiple Aws accounts & applications.

Use Cases:

- ⇒ Enable multi account access to your Aws account.
- ⇒ Enable single-sign-on access to your Aws Application

- ⇒ Enable Single Sign-on access to Amazon EC2 windows instances.
- ⇒ Enable Single Sign-on access to Cloud-based Application.

Aws WAF (Web App Firewall) : Protect your Web Applications from Common Exploits.

Use Cases:

⇒ Filter web traffic.

⇒ Prevent account TakeOver fraud.

⇒ Administer Aws WAF with APIs.

⑦ Storage : Reliable, Scalable, & Secure Storage for your data.

Use Cases:

⇒ Migrate applications to Aws. ⇒ Backup to Aws Storage.

⇒ Modernize application development ⇒ Build data lakes.

⇒ Process data at disconnected edge locations.

* Amazon S3 : Object Storage built to retrieve any amount of data from anywhere.

Use Cases:

⇒ Build a data lake ⇒ Archive data at the lowest cost ⇒ Backup & restore critical data.

* Amazon S3 Glacier Storage Classes : Long-term, Secure, durable storage classes for data archiving at the lowest cost & millsec access.

Use Cases:

⇒ Media asset Workflows. ⇒ Healthcare information archiving
⇒ Scientific data Storage. ⇒ Digital Preservation.
⇒ Long-term backup retention.

* Amazon Elastic Block Store: Easy to use, high performance block storage at any scale.

Use Cases:-

=> Build your SAN in the cloud for I/O intensive Applications.
=> Run Relational or NoSQL D.B.

=> Right size your big data analytics engines.

* Amazon Elastic File System: Serverless, fully elastic file storage.

Use Cases:-

=> Simplify Devops

=> Modernize application development. => Accelerate data science.

* Amazon FSx for Lustre: Fully managed shared storage built on the world's most popular high performance file system.

Use Cases:-

=> Accelerate machine learning

=> Enable high performance computing => Increase media workload agility.

* Amazon FSx for NetApp ONTAP: Fully managed shared storage built on NetApp's popular ONTAP file system.

Use Cases:-

=> Migrate workloads to AWS Seamlessly.
=> Build modern applications.

=> Simplify business continuity.

=> Modernize your data management.

* Amazon FSx for OpenZFS: fully managed Shared Storage built on the Popular OpenZFS file System.

Use Cases:

⇒ Migrate your Workloads to Aws Seamlessly.

⇒ Accelerate Content management.

⇒ Increase dev/test Velocity.

* Amazon FSx for Windows File Server: Fully managed file Storage built on windows Server.

Use Cases:

⇒ Migrate Windows File Servers to Aws.

⇒ Accelerate hybrid workloads.

⇒ Reduce SQL Server deployment Cost.

* Amazon File Cache: high-speed Cache for datasets stored anywhere.

Use Cases:

⇒ Increase media workload Agility.

⇒ Accelerate high Performance Computing.

⇒ Reduce ML training time.

* Aws Backup: Centrally manage & automate data Protection.

Use Cases:

⇒ Cloud-native backup.

⇒ Hybrid data Protection.

* Aws Elastic Disaster Recovery: Scalable, Cost-effective, application recovery to Aws.

Use Cases:

- ⇒ On-Premises to Aws. ⇒ Cloud to Aws.
- ⇒ Aws Region to Aws Region.
- * Aws Snow Family: Move Petabytes of data to & from Aws or process data at the edge.

Key Features:

- ⇒ On-board Computing ⇒ NES endpoint.
- ⇒ Encryption
- ⇒ Simple management & monitoring.

* Aws Storage Gateway: Provide on-Premises applications with access to virtually unlimited cloud storage.

Use Cases:

- ⇒ hybrid cloud workflows store. ⇒ Backup data to the cloud.
- ⇒ Migrate application data to EBS.
- ⑧ Cloud Financial Management with Aws: Transform your business with Cost transparency, Control, Forecasting, & Optimization.

Use Cases:

- ⇒ Organize ⇒ Control ⇒ Purchase
- ⇒ Report ⇒ budget ⇒ inspect
- ⇒ Access

* Aws Cost Explorer :- Visualize, understand, & manage your Aws Costs & usage Over time.

Use Cases :-

⇒ Build Custom applications. ⇒ Forecast your Costs.
⇒ Use Granular filtering.

* Aws Billing Conductor :- Simplify billing & reporting with Customizable Pricing & Cost visibility.

Use Cases :-

⇒ Map accounts financially. ⇒ Generate billing Reports.
⇒ Define billing Parameters.

* Aws Budgets :- Improve Planning & Cost Control with Flexible budgeting & ForeCasting.

Use Cases :-

⇒ Monitor Costs & usage ⇒ Respond to thresholds.
⇒ Create Scheduled reports.

* Aws Cost & Usage Reports :- Dive deeper into your Aws Cost & usage data.

Use Cases :-

⇒ Track your Savings Plan use. ⇒ Understand Cost anomalies.
⇒ Integrate with other analytic Services. ⇒ Understand trends in your bill.

* Reserved Instance Reporting : Manage & monitor your instance reservations.

Use Cases:-

- ⇒ Access RI Purchase recommendations.
- ⇒ Understand your RIs.
- ⇒ Receive RI usage & coverage alerts.
- * Savings Plans: Save up to 72% with a flexible Pricing model.

Use Cases:-

- ⇒ Save money on your steady-state usage.
- ⇒ Reduce Costs by modernizing workloads.
- ⇒ Centralize & Simplify Cost management.

Take

High