

DVA-C02 Service Map

Quick service-to-purpose map for developer workflows on AWS.

BEST FOR	Linking service names to the right use case quickly
FOCUS	Compute, integration, data, observability, and security
USE WITH	Cheat Sheet + Quick Summary

Category	Service	Best-fit use
Compute	Lambda	Run event-driven code without servers; tune memory, timeout, and concurrency.
Compute	EC2	Use when code needs OS-level control, custom runtimes, or long-lived processes.
Compute	Elastic Beanstalk	Managed app platform for simpler deployments with less platform wiring.
Containers	ECS	AWS-native container orchestration with simpler operational model than EKS.
Containers	EKS	Kubernetes-based orchestration when standardized K8s patterns matter.
Integration	SQS	Decouple producers and consumers with buffering and retry-friendly processing.
Integration	SNS	Pub/sub fanout to multiple subscribers and downstream consumers.
Integration	EventBridge	Route events by rules, patterns, and event buses.
Integration	Step Functions	Orchestrate multi-step workflows with state and branching.
API	API Gateway	Front door for REST or HTTP APIs, auth, throttling, and transformations.
Storage	S3	Object storage for assets, events, static content, and durable application data.
Database	DynamoDB	Primary NoSQL choice for low-latency key-value and document patterns.
Database	RDS / Aurora	Relational workloads, transactions, joins, and SQL-centric apps.
Performance	ElastiCache	Reduce repeated reads and lower latency with in-memory caching.
Observability	CloudWatch	Metrics, logs, alarms, dashboards, and operational visibility.

Category	Service	Best-fit use
Observability	X-Ray	Distributed tracing and latency breakdown across services.
Identity	Cognito	User sign-up, sign-in, federation, and token issuance for applications.
Identity	IAM / STS	Permissions and temporary credentials for app-to-AWS access.
Security	KMS	Key management for encryption workflows and protected data operations.
Security	Secrets Manager	Store and rotate secrets without embedding credentials in code.