# SAP-C02 Service Map

Quick service-to-purpose map for the AWS services that appear most often in SAP-C02 scenarios.

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| **BEST FOR** | Last review before mini test or app session |
| **FOCUS** | Service selection by category and architectural role |
| **USE WITH** | Cheat Sheet + Quick Summary |

## 1. Compute and integration

**EC2** — full control compute for custom OS and deep tuning.
**Lambda** — event-driven code with no server management.
**ECS / EKS / Fargate** — container orchestration choices by control and operations model.
**Step Functions** — stateful workflow orchestration across services.
**EventBridge / SNS / SQS** — routing, pub-sub, and decoupled queueing.

## 2. Storage and databases

**S3** — object storage, data lake, archive workflows, static assets.
**EBS / EFS / FSx** — block, shared file, and specialized file systems.
**RDS / Aurora** — managed relational engines for transactional workloads.
**DynamoDB** — key-value at scale with single-digit millisecond access.
**Redshift / OpenSearch** — analytics warehouse vs search/log analytics platform.

## 3. Network and delivery

**VPC** — isolation boundary for AWS networking.
**Transit Gateway** — central network hub across VPCs and on-prem.
**Direct Connect / VPN** — dedicated private link vs internet-based encrypted tunnel.
**Route 53** — DNS plus health checks and routing policies.
**CloudFront / Global Accelerator** — edge cache vs global front door.

## 4. Identity, security, and operations

**IAM / IAM Identity Center** — workload permissions vs workforce access.
**KMS / Secrets Manager** — encryption keys and secret lifecycle.
**CloudTrail / Config / Security Hub** — audit, compliance, and findings aggregation.
**CloudWatch / X-Ray** — metrics, logs, alarms, traces, service maps.
**Organizations / Control Tower** — multi-account governance and landing zones.