

AWS vs Azure vs GCP - Service Mapping

AWS Service	Azure Equivalent	GCP Equivalent	Purpose / Notes
Organizations	Management Groups / Subscriptions	Organizations / Folders / Projects	Central account and permission management
IAM	Azure Active Directory (AAD), RBAC	Cloud IAM	Identity and access management
VPC	Virtual Network (VNet)	Virtual Private Cloud (VPC)	Private networking
NACL & SG	Network Security Group (NSG)	Firewall Rules / Security Policies	Network access control
EC2	Virtual Machine (VM)	Compute Engine	Virtual servers
EBS	Managed Disks	Persistent Disks	Block storage
ALB	Application Gateway	HTTP(S) Load Balancer	Layer 7 load balancing
NLB	Azure Load Balancer	Network Load Balancer	Layer 4 load balancing
ASG & Launch Template	Virtual Machine Scale Sets (VMSS)	Instance Groups + Instance Templates	Auto-scaling compute resources
S3	Blob Storage	Cloud Storage	Object storage
EFS	Azure Files	Filestore	Shared file storage
Route53	Azure DNS	Cloud DNS	Domain Name System management
RDS	Azure SQL / Azure Database for PostgreSQL	Cloud SQL	Managed relational databases
DynamoDB	Cosmos DB (with Table API)	Firestore / Bigtable	NoSQL database
ACM	App Service Certificates / Key Vault	Certificate Manager / Managed certs	TLS certificate management
Parameter Store	App Configuration / Key Vault	Runtime Configurator / Secret Manager	Config and parameter management
Secrets Manager	Azure Key Vault	Secret Manager	Secure secret storage
KMS	Azure Key Vault (Keys)	Cloud KMS	Encryption key management
CloudFront	Azure Front Door / CDN	Cloud CDN	Content Delivery Network
CloudWatch	Azure Monitor / Log Analytics	Cloud Monitoring + Logging	Monitoring & logging
EventBridge	Event Grid / Event Hub	Eventarc / Pub/Sub	Event-driven architecture
CloudTrail	Azure Activity Logs / Diagnostic Settings	Audit Logs	API activity logging
CloudFormation	ARM Templates / Bicep / Terraform	Deployment Manager / Terraform	Infrastructure as code
CodeCommit	Azure Repos	Cloud Source Repositories	Git repositories
CodeBuild	Azure Pipelines (Build)	Cloud Build	Build automation

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CodeDeploy	Azure Pipelines / Deployment Center	Cloud Deploy	Deployment automation
CodePipeline	Azure DevOps Pipelines	Cloud Build + Workflows	CI/CD pipeline orchestration
ECR	Azure Container Registry (ACR)	Artifact Registry / Container Registry	Docker image registry
ECS	Azure Container Instances / AKS	Cloud Run / GKE	Container orchestration
EKS	Azure Kubernetes Service (AKS)	Google Kubernetes Engine (GKE)	Managed Kubernetes service
Lambda Functions	Azure Functions	Cloud Functions	Serverless compute
Elastic Cache	Azure Cache for Redis	Memorystore	In-memory caching
SQS	Azure Queue Storage / Service Bus	Pub/Sub	Messaging and queuing
GuardDuty	Microsoft Defender for Cloud	Security Command Center	Threat detection and security monitoring