


AWS

AZURE

GCP

OVERVIEW

Market Share	32.3%	16.9%	5.8%
Availability	24 Geographical Regions	60 Geographical Regions	24 Geographical Regions
Services	More than 212	More than 200	More than 90
Security	AWS Security Hub	Azure Security Center	Cloud Security Command Center
Compliance Offerings	50+	90+	50+
Pricing	Charges per hour	Charges per minute	Charges per minute
Administration	AWS IAM	Azure Active Directory	Cloud IAM
Management services	Amazon CloudInformation	Azure Resource Manager	Cloud Deployment Manager

NETWORKING SERVICES

Virtual Network	VPC (Virtual Private Cloud)	VNET (Virtual Network)	Cloud Virtual Network
Firewall	AWS Firewall /WAF	Azure Firewall	Google Cloud Firewalls
Load Balancing	ELB (Elastic Load Balancer)	Azure Load Balancer	Google Cloud Load Balancer
CDN	Amazon CloudFront	Azure CDN	Cloud CDN
DNS	Route 53	Azure DNS	Google Cloud DNS

COMPUTE SERVICES

VM (Compute Instance)	EC2	Azure Virtual Machine	Google Compute Engine
Container	AWS Elastic Container or Kubernetes Service	AKS (Azure Kubernetes Service)	GKE (Google Kubernetes Engine)
PaaS	AWS Elastic Beanstalk	App Service	Google App Engine
Serverless/ FaaS	AWS Lambda	Azure Function	Google Cloud Functions

DATABASE & STORAGE SERVICES

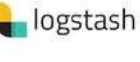
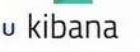
RDBMS (SQL, MySQL, etc.)	AWS RDS	Azure SQL/ Database for MySQL/PostgreSQL	Cloud SQL
NoSQL	DynamoDB, Simple DB	Azure Cosmos DB, Table Storage	Cloud Datastore, BigTable
File Storage	Elastic File System	Azure File Storage	Google Filestore
Object Storage	S3 (Simple Storage Service)	Blob Storage	Google Cloud Storage
Archive Storage	Amazon Glacier	Azure Archive Storage	Google Storage (Archive Storage)
Data Warehouse/Data Lake	Amazon Redshift	Azure Synapse Analytics	Google BigQuery

SPECIALIZED SERVICES

DevOps	CodePipeline, CodeBuild, CodeDeploy, CodeStar	Azure Boards, Pipelines, Repos, Test Plans, Artifacts	GCP DevOps CloudBuild, Artifact Registry
AI & ML	Amazon SageMaker, Amazon Comprehend, Amazon Lex, Amazon Polly	Azure Machine Learning, Azure Databricks, Azure Cognitive Search, Azure Bot Service, Cognitive Services	Vertex AI, AutoML, Dataflow CX, Cloud Vision, Virtual Agents
IoT	FreeRTOS, IoT Core, Greengrass, IoT Analytics, SiteWise	Azure IoT Hub/Central, IoT Edge, Azure Sphere, Azure RTOS	Google Cloud IoT Core
AR & VR	Amazon Sumerian	Azure Mixed Reality (Spatial Anchors/Remote Rendering)	ARCore
Business Analytics	Amazon QuickSight	Azure Power BI	Looker

MONITORING CHEAT SHEET

 blog.bytebytego.com

Element	aws	Google Cloud	Azure	Open Source / 3rd Party
Data Collection	 Cloud Watch  Cloud Watch Logs  Cloud Trail  Config  Custom agents / Scripts	 Cloud Monitoring  Cloud Logging  Cloud Audit Logs  Custom agents / Scripts	 Azure Monitor  Azure Activity Log  Azure Policy  Security Center  Custom agents / Scripts	 ZABBIX  Prometheus  fluentd  logstash  splunk  ELK  telegraf  Nagios  Sensu
Data Storage	 S3	 Cloud Storage	 Blob Storage	 MINIO  GLUSTER  ceph
Data Analysis	 CloudWatch Metrics Insights	 Cloud Operations	 Azure Monitor Metrics Explorer	 Grafana  tableau  kibana
Alerting	 SNS	 Cloud Monitoring Alerts	 Azure Monitor Alerts	 PagerDuty  slack
Visualization	 CloudWatch Dashboard  QuickSight	 Cloud Monitoring Dashboard  Data Studio	 Azure Monitor Dashboard  Power BI	 Grafana  Superset  Metabase  tableau  redash
Reporting and Compliance	 Config Rules  Trusted Advisor	 Security Command Center	 Policy Compliance  Security Center Compliance	 OpenSCAP  CISOfy
Automation	 Lambda  Step Functions	 Cloud Functions	 Azure Functions  Azure Automation	 Jenkins  ANSIBLE
Integration	 CloudFormation  CodePipeline	 Cloud Deployment Manager  Cloud Build	 Azure Automation  Azure DevOps	 Pulumi  Terraform  ANSIBLE  Jenkins  GitLab  Travis CI
Feedback Loop	 Well-Architected Tool	 Well-Architected Framework	 Well-Architected Framework	 Scout APM  Cloud Custodian

Cloud Services Comparison Cheatsheet

SERVICES	Azure	aws	Google Compute
Analytics	Azure stream Analytics	Amazon Kinesis	Cloud Dataflow
App Hosting	Azure cloud services	Amazon Elastic Beanstalk	Google App Engine
Automation	Azure Automation	AWS Opsworks	Compute Engine Management
Block Storage	Azure Managed Storage	Amazon Elastic Block Storage	Persistent Disk
Compliance	Azure Trust Center	AWS Cloud HSM	Google Cloud Platform security
Computing	Virtual Machines	Elastic Compute Cloud (EC2)	Compute Engine
Cloud Specific Container	Azure Container service	EC2 Container Service	Container Engine
Cloud Agnostic Container	Azure AKS	Amazon EKS	GKE
Content Delivery Network (CDN)	Azure CDN	Amazon CloudFront	Cloud CDN
DNS Services	Azure Traffic Manager	AWS Route 53	Cloud DNS
Identity & Access Management	Azure Active Directory	AWS Identity and Access Management	Cloud Identity Access Management
Key Management Services	Azure Key Vault	AWS KMS	Google Cloud KMS
Load Balancing	Load Balancing for Azure	Elastic Load Balancing	Cloud Load Balancing
Log Monitoring	Azure Operational Insights	Amazon CloudTrail	Cloud Logging
NoSQL Database Options	Azure DocumentDB	AWS DynamoDB	Cloud Datastore
Notifications	Azure Notification Hub	Amazon Simple Notification service	None
Object Storage	Azure Blob Storage	Amazon Simple Storage (S3)	Cloud Storage
Performance Monitoring	Azure Application Insights	Amazon CloudWatch	Stackdriver Monitoring
Private Connectivity	Azure Express Route	AWS Direct Connect	Cloud Interconnect
Relational Database	Azure Relational Database	Amazon RDS	Cloud SQL
Scaling Options	Azure Autoscale	Auto Scaling	Auto Scaler
Serverless Computing	Azure Functions	AWS Lambda	Google Cloud Functions
Virtual Network	Azure Virtual Network	Amazon VPC	Cloud Virtual Network



- Elastic Compute Cloud (EC2)
- Elastic Beanstalk
- Lambda
- Elastic Container Service
- Auto Scaling
- Simple Storage Service
- Elastic Block Storage
- CloudFront
- RDS
- DynamoDB
- VPC
- Direct Connect
- Route 53
- CloudTrail
- CloudWatch
- Identity and Access Management (IAM)
- CloudHSM
- Kinesis
- OpsWorks
- CloudFormation
- Simple Notification System
- Elastic Load Balancing



- Virtual Machine
- Cloud Services
- Functions
- Container Service
- Autoscale
- Blob Storage
- Managed Storage
- CDN
- SQL Database
- DocumentDB
- Virtual Networks
- Express Route
- Traffic Manager
- Operational Insights
- Application Insights
- Azure Active Directory
- Azure Trust Center
- Stream Analytics
- Automation
- Resource Manager
- Notification Hub
- Load Balancing



- Compute Engine
- Google App Engine
- Cloud Functions
- Container Engine
- Autoscaler
- Cloud Storage
- Persistent Disk
- Cloud CDN
- Cloud SQL
- Cloud Datastore
- Cloud Virtual Network
- Cloud Interconnect
- Cloud DNS
- Cloud Logging
- Stackdriver Monitoring
- Cloud Identity and Access Management (IAM)
- Google Cloud Platform Security
- Cloud Dataflow
- Compute Engine Management
- Cloud Deployment Management
- Cloud Load Balancing



HUAWEI CLOUD

- Elastic Compute Server
- ServiceStage
- FunctionGraph
- Cloud Container Engine
- Autoscaling
- Object Storage Service
- Elastic Volume Service
- Cloud Delivery Network
- RDS
- Document Database Service
- Virtual Private Cloud
- Direct Connect
- Cloud DNS
- Cloud Trace
- Cloud Eye
- Identity and Access Management
- Data Encryption Workshop
- Data Ingestion Service
- Cloud Service Engine
- Application Orchestration Service
- Simple Message Notification
- Elastic Load Balancing



-  Elastic Compute Cloud (EC2)
-  Elastic Kubernetes Service (EKS)
-  Lambda
-  Simple Storage Service (S3)
-  Elastic Block Store
-  Elastic File System
-  Virtual Private Cloud
-  Route 53
-  Elastic Load Balancing
-  Web Application Firewall
-  RDS
-  DynamoDB
-  Redshift
-  Elastic MapReduce
-  Kinesis
-  SageMaker
-  Glue
-  EventBridge
-  Simple Queuing Service
-  Simple Notification Service
-  CloudWatch
-  CloudFormation
-  IAM
-  KMS



-  Virtual Machine
-  Azure Kubernetes Service (AKS)
-  Azure Functions
-  Blob Storage
-  Managed Disk
-  File Storage
-  Virtual Network
-  DNS
-  Load Balancer
-  Web Application Firewall
-  SQL Database
-  Cosmos DB
-  Synapse Analytics
-  HDInsight
-  Streaming Analytics
-  Machine Learning
-  Data Factory
-  Event Grid
-  Storage Queues
-  Service Bus
-  Monitor
-  Resource Manager
-  Active Directory
-  Key Vault



-  Compute Engine
-  Google Kubernetes Engine (GKE)
-  Cloud Functions
-  Cloud Storage
-  Persistent Disk
-  File Store
-  Virtual Private Cloud
-  Cloud DNS
-  Cloud Load Balancing
-  Cloud Armor
-  Cloud SQL
-  Firebase Realtime Database
-  BigQuery
-  Dataproc
-  Dataflow
-  Vertex AI
-  Data Fusion
-  Eventarc
-  Pub/Sub
-  Firebase Cloud Messaging
-  Cloud Monitoring
-  Deployment Manager
-  Cloud Identity
-  Cloud KMS



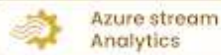
-  Virtual Machine
-  Oracle Container Engine
-  OCI Functions
-  Object Storage
-  Persistent Volume
-  File Storage
-  Virtual Cloud Network
-  DNS
-  Load Balancer
-  Web Application Firewall
-  ATP
-  NoSQL Database
-  Autonomous Data Warehouse
-  Big Data
-  Streaming
-  Data Science
-  Data Integration
-  Events
-  Streaming
-  Notifications
-  Monitoring
-  Resource Manager
-  IAM
-  Vault

Cloud Services Comparison Cheatsheet

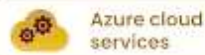
SERVICES



Analytics



App Hosting



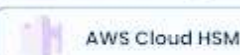
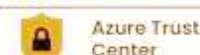
Automation



Block Storage



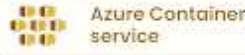
Compliance



Computing



Cloud Specific Container



Cloud Agnostic Container



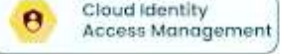
Content Delivery Network (CDN)



DNS Services



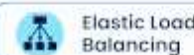
Identity & Access Management



Key Management Services



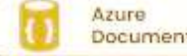
Load Balancing



Log Monitoring



NoSQL Database Options



Notifications



None

Object Storage



Performance Monitoring



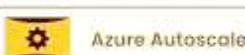
Private Connectivity



Relational Database



Scaling Options



Serverless Computing



Virtual Network



Cloud Database Cheat Sheet

blog.bytebytego.com

OVHcloud

DB Type

Relational

Columnar

Key Value

In-Memory

Wide Column

Time Series

Immutable Ledger

Geospatial

Graph

Document

Text Search

Blob

Structured

Semi Structured

Unstructured

- RDS
- Redshift
- DynamoDB
- ElastiCache
- Keyspaces
- Timestream
- Quantum Ledger DB
- Keyspaces
- Neptune
- Document DB
- OpenSearch
- S3

- SQL Database
- Synapse Analytics
- Cosmos DB
- Azure Cache for Redis
- Cosmos DB
- Time Series Insights
- Confidential Ledger
- Cosmos DB
- Cosmos DB
- Cosmos DB
- Cognitive Search
- Blob Storage

- Cloud SQL
- BigQuery
- BigTable
- Memory Store
- BigTable
- BigTable
- BigQuery
- CloudSpanner
- BigTable
- CloudSpanner
- FireStore
- CloudSearch
- Cloud Storage

Open Source / 3rd Party

- Oracle
- MySQL
- Snowflake
- Click House
- Scylla
- Memcached
- Cassandra
- Scylla
- Influx
- OpenTSDB
- Hyper Ledger Fabric
- PostGIS
- Dgraph
- Couchbase
- Elastic search
- Elassandra
- Ceph
- OpenIO

Managed OpenSource Database

- Managed PostgreSQL
- Managed MySQL
- Managed Redis
- Managed Redis
- Managed Cassandra
- Managed M3DB
- Managed M3 Aggregator
- Solutions with partners only
- Managed Redis
- Managed Grafana
- Managed MongoDB
- Managed OpenSearch
- Object Storage / OpenIO
- Object Storage / Openstack Swift
- Cold Archive / OpenIO
- Cloud Archive / Openstack Swift
- Cloud Disk Array / Ceph

3rd Party Database

- SQL Server