

|                                        | Microsoft Azure                                   | Amazon Web Services (AWS)                          | Google Cloud (GCS)                                |
|----------------------------------------|---------------------------------------------------|----------------------------------------------------|---------------------------------------------------|
| Regions                                | Azure Regions                                     | AWS Global Infrastructure                          | Google Compute Regions and Zones                  |
|                                        |                                                   |                                                    |                                                   |
| Compute Services                       | Virtual Machines                                  | Elastic Compute Cloud (EC2)                        | Compute Engine                                    |
|                                        | Virtual Machine Images                            | Lightsail                                          | Google App Engine                                 |
|                                        | Azure Cloud Services                              | Amazon Elastic Beanstalk                           |                                                   |
|                                        |                                                   |                                                    |                                                   |
| Container Support                      | Azure Container Service                           | EC2 Container Service                              | Kubernetes Engine                                 |
|                                        | Container Registry                                | EC2 Container Registry                             | Container Registry                                |
|                                        | Container Instances                               | Fargate                                            |                                                   |
|                                        | Docker Virtual Machine Extension                  |                                                    |                                                   |
|                                        | Azure Service Fabric                              |                                                    |                                                   |
|                                        |                                                   |                                                    |                                                   |
| Scaling                                | Azure Autoscale                                   | Auto Scaling                                       | Autoscaler                                        |
|                                        |                                                   |                                                    |                                                   |
| Management, Monitoring & Analytics     | HDInsight                                         | Elastic Map Reduce (EMR)                           | Cloud Dataproc                                    |
|                                        | Azure Stream Analytics                            | Amazon Kinesis                                     | Cloud Dataflow                                    |
|                                        | Data Lake Analytics                               | Athena                                             | BigQuery                                          |
|                                        | SQL Data Warehouse                                | Amazon Pinpoint                                    | Cloud Deployment Manager                          |
|                                        | Azure Resource Groups                             | Amazon CloudFormation                              | Cloud Platform Security                           |
|                                        | Azure Advisor                                     | Trusted Advisor                                    | Cloud Console                                     |
|                                        | Azure Log Analytics                               | Amazon CloudTrail                                  | Stackdriver Monitoring                            |
|                                        | Azure Application Insights                        | Amazon CloudWatch                                  | Cloud Pub                                         |
|                                        | Azure Event Hubs                                  | X-Ray                                              | Cloud Shell                                       |
|                                        | Azure Notification Hubs                           | Amazon Kinesis                                     | Cloud Billing API                                 |
|                                        | Azure Portal                                      | Amazon Simple Notification Service (SNS)           |                                                   |
|                                        | Billing API                                       | Management Console                                 |                                                   |
|                                        | Resource Health                                   | Usage and Billing Report                           |                                                   |
|                                        |                                                   | Personal Health Dashboard                          |                                                   |
|                                        |                                                   |                                                    |                                                   |
| Government Services                    | Azure Government                                  | AWS GovCloud                                       |                                                   |
|                                        |                                                   |                                                    |                                                   |
| Desktop Services                       | Azure RemoteApp                                   | Amazon WorkSpaces                                  |                                                   |
|                                        |                                                   | Amazon AppStream                                   |                                                   |
|                                        |                                                   |                                                    |                                                   |
| Storage                                | Azure Storage                                     | Amazon Simple Storage (S3)                         | Cloud Storage                                     |
|                                        | Azure Blob Storage                                | Amazon Elastic Block Storage (EBS)                 | Compute Engine Persistent Disks                   |
|                                        |                                                   |                                                    |                                                   |
| Hybrid Cloud Storage                   | StorSimple                                        | AWS Storage Gateway                                | Egnyte Sync                                       |
|                                        |                                                   |                                                    |                                                   |
| Backups                                | Azure Backup                                      | Amazon Glacier                                     | Cloud Storage Coldline                            |
|                                        |                                                   |                                                    |                                                   |
| Storage Services                       | Azure Data Box                                    | Amazon Snowball                                    | Storage Transfer Service                          |
|                                        | Azure File Storage (how to)                       | Elastic File System                                | ZFS / Avere                                       |
|                                        | Azure Site Recovery                               | AWS Storage Gateway                                |                                                   |
|                                        |                                                   |                                                    |                                                   |
| Content Delivery                       | Azure CDN                                         | Amazon CloudFront                                  | Cloud Content Delivery Network                    |
|                                        |                                                   |                                                    |                                                   |
| Databases                              | Azure SQL                                         | Amazon Relational Database Service                 | Cloud SQL / Cloud Spanner                         |
|                                        | Azure Data Lake                                   | Amazon Redshift                                    | BigQuery                                          |
|                                        |                                                   |                                                    |                                                   |
| NoSQL                                  | Azure Cosmos DB                                   | Amazon Dynamo DB                                   | Cloud Datastore / Bigtable                        |
|                                        | Azure Redis Cache                                 | Amazon ElastiCache                                 | Memcache                                          |
|                                        | Table Storage                                     | Amazon Neptune                                     |                                                   |
|                                        |                                                   |                                                    |                                                   |
| Data Orchestration                     | Azure Data Factory                                | AWS Data Pipeline                                  |                                                   |
|                                        |                                                   |                                                    |                                                   |
| Networking                             | Azure Virtual Network                             | Amazon Virtual Private Cloud (VPC)                 | Virtual Private Cloud                             |
|                                        | Azure ExpressRoute                                | AWS Direct Connect                                 | Google Cloud Interconnect                         |
|                                        | Azure Traffic Manager                             | Amazon Route 53                                    | Cloud DNS                                         |
|                                        | VPN Gateway                                       |                                                    | Cloud VPN                                         |
|                                        |                                                   |                                                    |                                                   |
| Visualization                          | Power BI                                          | QuickSight                                         |                                                   |
|                                        | Power BI Embedded                                 |                                                    |                                                   |
|                                        |                                                   |                                                    |                                                   |
| Load Balancing                         | Load Balancing for Azure (how to)                 | Elastic Load Balancing                             | Cloud Load Balancing                              |
|                                        |                                                   |                                                    |                                                   |
| Security, Identity & Access Management | Azure Active Directory / IAM                      | AWS Directory Service                              | Cloud Identity & Access Management                |
|                                        | Information Protection                            | AWS Identity & Access Management                   | Cloud Identity-Aware Proxy                        |
|                                        | Storage Service Encryption                        | AWS Key Management Service                         | Firebase Authentication                           |
|                                        | Azure Key Vault                                   | Web Application Firewall                           | Cloud Key Management Service                      |
|                                        | Application Gateway Web Application Firewall      | Inspector                                          | Cloud Security Command Center                     |
|                                        | Azure Security Center                             | Amazon GuardDuty                                   | Cloud Security Scanner                            |
|                                        | App Service Certificates                          | AWS Certificate Manager                            |                                                   |
|                                        | Microsoft Service Trust Portal                    | Artifact                                           |                                                   |
| Azure DDoS Protection Service          | Shield                                            |                                                    |                                                   |
|                                        |                                                   |                                                    |                                                   |
| Multi-Factor Authentication            | Azure Multi-Factor Authentication                 | AWS Multi-Factor Authentication                    | Cloud Identity Aware Proxy / Security Enforcement |
|                                        |                                                   |                                                    |                                                   |
| Compliance                             | Azure Trust Center                                | AWS CloudHSM                                       | Google Cloud Platform Security                    |
|                                        |                                                   |                                                    |                                                   |
| API Management                         | Azure API Management                              | Amazon API Gateway                                 | Cloud Endpoints                                   |
|                                        |                                                   |                                                    |                                                   |
| Automation                             | Azure Automation                                  | AWS OpsWorks                                       | Compute Engine Management                         |
|                                        | Azure Batch                                       | Amazon Simple Queue Service (SQS)                  | Cloud Dataflow                                    |
|                                        | Azure Service Bus                                 | Amazon Simple Workflow (SWF)                       | Cloud Sub                                         |
|                                        | Git Deployment                                    | AWS Config                                         |                                                   |
|                                        | Azure Scheduler                                   | AWS CodeDeploy                                     |                                                   |
|                                        | Azure Search                                      | Amazon CloudSearch                                 |                                                   |
|                                        | Azure Logic Apps                                  |                                                    |                                                   |
|                                        |                                                   |                                                    |                                                   |
| Email Service                          | Azure BizTalk Services                            | Amazon Simple Email Services (SES)                 |                                                   |
|                                        |                                                   |                                                    |                                                   |
| Media Services                         | Azure Media Services                              | Amazon Elastic Transcoder                          | Cloud Video Intelligence API                      |
|                                        |                                                   |                                                    |                                                   |
| Other Services & Integrations          | Azure Machine Learning Studio                     | Amazon Machine Learning                            | Cloud AI                                          |
|                                        | Azure Machine Learning Workbench                  | Amazon SageMaker                                   | Cloud Functions                                   |
|                                        | Azure Functions                                   | AWS Lambda                                         |                                                   |
|                                        | Azure Event Grid                                  |                                                    |                                                   |
|                                        |                                                   |                                                    |                                                   |
| Virtual Assistant                      | Cortana Intelligence Suite                        | Alexa Skills Kits                                  | Intelligent Applications                          |
|                                        | Microsoft Bot Framework + Bot Service             | Lex                                                |                                                   |
|                                        |                                                   |                                                    |                                                   |
| Speech Recognition Services            | Bing Speech API                                   | Lex / Polly / Transcribe                           | Dialogflow                                        |
|                                        | Language Understanding Intelligent Service (LUIS) | Lex                                                |                                                   |
|                                        | Speaker Recognition API                           | Translate                                          |                                                   |
|                                        | Custom Recognition Intelligent Service (CRIS)     | Comprehend                                         |                                                   |
|                                        | Translator Text API                               |                                                    |                                                   |
|                                        | Text Analytics API                                |                                                    |                                                   |
|                                        |                                                   |                                                    |                                                   |
| Visual Recognition                     | Computer Vision API + Face API + Emotions API     | Rekognition                                        | Cloud Vision                                      |
|                                        | Media Analytics + Media Indexer                   | Rekognition Video                                  |                                                   |
|                                        |                                                   |                                                    |                                                   |
| Internet Of Things (IoT)               | IoT Suite                                         | IoT Core                                           | Cloud IoT Edge                                    |
|                                        | IoT Hub                                           | IoT SDK                                            | Cloud IoT Core                                    |
|                                        | Functions on IoT Edge                             | IoT Device Management                              |                                                   |
|                                        | Time Series Insights                              | IoT 1-Click                                        |                                                   |
|                                        | Event Hubs                                        | IoT Device Defender                                |                                                   |
|                                        | Event Hubs Capture                                | IoT Analytics                                      |                                                   |
|                                        |                                                   | FreeRTOS                                           |                                                   |
|                                        |                                                   | Kinesis Streams                                    |                                                   |
|                                        |                                                   | Kinesis Firehose                                   |                                                   |
|                                        |                                                   |                                                    |                                                   |
| Mobile Services                        | Mobile Apps                                       | Mobile Hub                                         | Mobile Solutions                                  |
|                                        | Xamarin Apps                                      | Mobile SDK                                         |                                                   |
|                                        | Azure Active Directory B2C                        | Amazon Cognito                                     |                                                   |
|                                        | DevTest Labs (backend)                            | Device Farm                                        | Cloud Test Lab                                    |
|                                        | HockeyApp                                         |                                                    |                                                   |
|                                        |                                                   |                                                    |                                                   |
| Game Development                       | Azure Gaming                                      | GameLift                                           | Firebase                                          |
|                                        |                                                   | Lumberyard                                         |                                                   |
|                                        |                                                   |                                                    |                                                   |
| Development Tools                      | Azure Source Repositories                         | AWS Source Repositories                            | Cloud Source Repositories                         |
|                                        | Azure Visual Studio Online                        | CodeBuild / CodeDeploy / CodeCommit / CodePipeline | Cloud SDK                                         |
|                                        | Azure Command Line Interface                      | Command Line Interface                             | Cloud Tools For Powershell                        |