



Cloud Platform Comparison

Microsoft Azure



LIFT & SHIFT	CONSUME PAAS SERVICES	RE-ARCHITECT FOR CLOUD	LIFT & SHIFT	CONSUME PAAS SERVICES	RE-ARCHITECT FOR CLOUD	LIFT & SHIFT	CONSUME PAAS SERVICES	RE-ARCHITECT FOR CLOUD
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COMPUTE

VIRTUAL SERVERS	Virtual Machines		EC2			Compute Engine		
AUTOSCALE	VM Scale Sets	App Service Autoscaling	Autoscaling			Autoscaling		
VIRTUAL SERVER DISK	Page Blobs Premium Storage		Elastic Block Store (EBS)			Persistent Disks		
CONTAINER MANAGEMENT	Container Service		EC2 Container Service			Container Engine		
BACKEND PROCESSING LOGIC		Cloud Services (worker role) Functions Logic Apps Web Jobs Batch			Lambda			Cloud Functions
JOB		Service Fabric						Cloud Functions
MICROSERVICES								Cloud Functions
WEB APPLICATIONS		Web Apps Cloud Services (web role)		Elastic Beanstalk			App Engine	
API RUNTIME		API Apps						
DISASTER RECOVERY		Site Recovery						
PREDEFINED TEMPLATES	Azure Quickstart templates		AWS Quick Start					
MARKETPLACE	Azure Marketplace		AWS Marketplace				Cloud Launcher	

STORAGE & CONTENT DELIVERY

OBJECT STORAGE		Blob Storage		S3				Cloud Storage
SHARED FILE STORAGE	File Storage		Elastic File System					
ARCHIVING & BACKUP		Backup (software) Cool Blob Storage (storage)		Glacier & S3 (storage)				Cloud Storage Nearline (storage)
DATA TRANSPORT	Import/Export		Import/Export Snowball					
CONTENT DELIVERY		Content Delivery Network		CloudFront				Cloud CDN

DATABASE

RELATIONAL DATABASE		SQL Database		RDS				Cloud SQL
NOSQL DATABASE			DocumentDB			DynamoDB		Cloud Datastore
DATA WAREHOUSE		SQL Data Warehouse		Redshift				BigQuery
TABLE STORAGE			Table Storage			SimpleDB		Cloud Bigtable
CACHING		Azure Redis Cache		ElasticCache				Memcache (App Engine)
DATABASE MIGRATION		SQL Database Migration Wizard		Database Migration Service				

ANALYTICS & BIG DATA

BIG DATA PROCESSING			HDInsight		Elastic MapReduce (EMR)			Cloud Dataproc
DATA ORCHESTRATION			DataFactory		Data Pipeline			Cloud Dataflow
ANALYTICS			Stream Analytics Data Lake Analytics Data Lake Store		Kinesis Analytics			Cloud Dataflow
VISUALISATION	Power BI				QuickSight			Cloud Datalab
MACHINE LEARNING		Machine Learning			Machine Learning			Cloud Machine Learning Prediction API
INTELLIGENCE API		Cognitive Services (Language, Speech, Vision, Knowledge)						Translate, Speech, Vision
SEARCH		Search		Elasticsearch Service				Search API (App Engine)
DATA DISCOVERY		Data Catalog						
GENOMICS								Google Genomics

INTERNET OF THINGS

STREAMING DATA		Event Hubs		Kinesis Firehose Kinesis Streams				Cloud Dataflow
INTERNET OF THINGS		IoT Hub		IoT				

MOBILE SERVICES

PRO APP DEVELOPMENT		Mobile Apps		Mobile Hub Cognito				App Engine Firebase
HIGH-LEVEL APP DEVELOPMENT	PowerApps							
ANALYTICS		Mobile Engagement		Mobile Analytics				
NOTIFICATION		Notification Hubs		Simple Notification Service				

APPLICATION SERVICES

EMAIL ADDRESS				Simple Email Service				Email Service (App Engine)
MESSAGING		Queue Storage Service Bus Queues Service Bus Topics Service Bus Relay		Simple Queue Service Simple Notification Service				Cloud Pub/Sub Task Queue (App Engine)
WORKFLOW		Logic Apps		Simple Workflow Service				
APP TESTING		Xamarin Test Cloud (front end) Azure DevTest Labs (back-end)		Device Farm (front end)				Cloud Test Lab (front & back-end)
API MANAGEMENT			API Management			API Gateway		Cloud Endpoints
APPLICATION STREAMING	RemoteApp			App Stream				
SEARCH		Search		CloudSearch				Search API (App Engine)
MEDIA TRANSCODING		Encoding		ElasticTranscoder				
MEDIA STREAMING		Live and on-demand streaming						
OTHER MEDIA SERVICES		Media Player Media Indexer Content Protection						

NETWORKING

NETWORKING	Virtual Network		Virtual Private Cloud					Cloud Virtual Network
DOMAIN NAME SYSTEM (DNS)	DNS Traffic Manager		Route 53					Cloud DNS
DEDICATED NETWORK	ExpressRoute		Direct Connect					Cloud Interconnect
LOAD BALANCING	Load Balancer Application Gateway		Elastic Load Balancing					Cloud Load Balancing

SECURITY & IDENTITY

AUTHENTICATION & AUTHORISATION	Azure AD RBAC Multi-Factor Authentication		Identity and Access Management Multi-Factor Authentication					Google IAM Cloud Resource Manager Google Identity Toolkit Google Signin
ENCRYPTION	Key Vault BYOK		Key Management Service CloudHSM BYOK					Platform level encryption BYOK
FIREWALL			Web Application Firewall					
SECURITY	Security Center		Inspector					Cloud Security Scanner (App Engine)
DIRECTORY	Azure Active Directory Azure Active Directory B2C Azure Active Directory Domain Services		Directory Service					

MANAGEMENT & MONITORING

DEPLOYMENT ORCHESTRATION	Resource Manager Automation VM Extensions		OpsWorks CloudFormation					Cloud Deployment Manager
MANAGEMENT & MONITORING	Log Analytics Azure Portal Application Insights		CloudWatch CloudTrail					Cloud Console Stackdriver Logs API (App Engine) Cloud Mobile App Cloud Shell
OPTIMISATION			Trusted Advisor					
JOB SCHEDULING	Scheduler							Cron Service (App Engine)
CATALOGUE SERVICE			Service Catalog					
SOURCE CODE MANAGEMENT	Visual Studio Team Services		CodeCommit					Cloud Source Repositories
ADMINISTRATION	Azure Portal (audit logs)		Config					Audit Logs
PROGRAMATIC ACCESS	Azure Command Line Interface Azure PowerShell Azure SDK		Command Line Interface AWS SDK					Command Line Interface Google Cloud SDK

HYBRID

NETWORK	Virtual Network / VPN		Virtual Private Cloud / VPN					Cloud Virtual Network / VPN
MESSAGING		Service Bus Relay						
APPLICATIONS		Hybrid Connection Manager						
DATABASE		SQL Server Stretch Database SQL Database Replication		RDS Database Replication				Cloud SQL Replication
DATA INGESTION		Data Management Gateway						
IDENTITY	AAD Connect / ADFS		AD Connector					
STORAGE		StorSimple						
MANAGEMENT & MONITORING	Operations Management Suite							Slackdriver (AWS)

