

CYCLECLOUD

Cloud-Agnostic Glossary

Each cloud service provider (CSP) offers unique features, but there are many similarities, too. CSPs are constantly adding new services. The information here is accurate to the best of our understanding as of September 2016.

Concept	Amazon Web Services	Microsoft Azure	Google Cloud Platform
Virtual machine service	Elastic Compute Cloud (EC2)	Virtual Machines	Google Compute Engine (GCE)
Virtual machine	Instance	virtual machine	VM instance
Reduced cost, non-guaranteed virtual machine	Spot Instance	(none)	Preemptible VM Instance
Geographically-distinct location	Region	Region (sometimes called Location)	Region
Datacenter within a region	Availability Zone	Data center	Zone
Special region/service for U.S. government	GovCloud	Azure Government	(none)
Hardware configuration	MachineType	Instance	Machine type
Single-tenant	Dedicated Host	(no special name) ¹	(none)
Disk image for launching a virtual machine	Amazon Machine Image (AMI)	virtual machine image	image
Firewall rules	Security Groups	Network security group (NSG)	(no special name)
Dynamic block storage	Elastic File System	File Storage	(none) ²

¹ Not an option that can be enabled, but exists for certain instances

² Avere provides a third-party dynamic storage service

Concept	Amazon Web Services	Microsoft Azure	Google Cloud Platform
Cloud-based object storage	Amazon Simple Storage Service (Amazon S3)	Blob Storage	Google Cloud Storage
Virtual network interface	Elastic Network Interface	NIC	(no special name)
Statically-assigned public IP address	Elastic IP	Reserved IP	(no special name)
Logical network separation	Virtual Private Cloud (VPC)	Virtual Network (VNet)	Subnet
Managed DNS service	Route53	Azure DNS	CloudDNS
Higher-performance networking	Enhanced Networking	InfiniBand ³	(none)
Direct customer-to-CSP network peering	Direct Connect	ExpressRoute	Cloud Interconnect
Logically-grouped virtual machines	Placement Group	Affinity Group	(none)
Group of identical CSP-scaled machines	Autoscaling Group	Scale Set	Managed instance group
Identifier for API calls	Access Key	(none) ⁴	Client key
Secret for API calls	Secret Key		Client secret
User management	Identity and Access Management	Azure AD/Role-Based Access Control	Cloud IAM
Custom key-value pairs for reporting	Tag	Tag	Label

Cycle Computing accelerates innovation by providing simple, managed access to Big Compute. Our software makes cloud computation productive by orchestrating workflows, managing data, balancing providers, and enabling users in a secure, controlled way.

©2016 Cycle Computing All rights reserved.

³ Azure offers low latency InfiniBand interconnect for select instance/operating system combinations

⁴ Azure API calls require a subscription ID, tenant ID, and application ID. These do not match directly to the other providers