

# Alibaba Cloud Offerings

BCX ALP Cloud is based on Alibaba Cloud's Apsara Stack technology platform and for the initial launch, is deployed in one region (Johannesburg) containing two availability zones (AZs). The primary AZ is in the Teraco Isando JB3 facility, whilst the secondary AZ is deployed in BCX's NDC1 facility in Midrand. Work is currently underway to expand ALP Cloud to include a region with a single AZ in Maputo, Mozambique, with deployments in other African countries under consideration.



Product Family	Product Category	Product	Product Overview
IaaS	Compute	<b>Elastic Compute Service [ECS]</b>	<p>Elastic Compute Service [ECS] is a computing service that features elastic processing capabilities. Compared with physical servers, ECS instances are more user-friendly and can be managed more efficiently. You can create instances, resize disks, and add or release any number of ECS instances at any time based on your business needs.</p> <p>An ECS instance is a virtual computing environment that contains the most basic components of computers such as the CPU, memory, and storage. Users perform operations on ECS instances. Instances are core components of ECS, and operations can be performed on instances through the ECS console. Other resources, such as block storage, images, and snapshots, can only be used after they are integrated with ECS instances.</p>
		<b>Container Services:</b>  <b>Alibaba Container Registry [ACR]*</b>	<p>Alibaba Container Registry [ACR] is a platform that allows you to manage and distribute cloud-native artifacts in a secure and efficient manner. Cloud-native artifacts include container images and Helm charts that meet the standards of Open Container Initiative [OCI].</p> <p>ACR provides the following features: image permission management, synchronous image distribution, and content signing. These features allow you to manage the entire lifecycle of container images and simplify the setup and O&amp;M of ACR.</p> <p>ACR is integrated with Container Service for Kubernetes [ACK] to easily create and deliver a one-stop solution for cloud-native applications.</p>
		<b>Container Services:</b>  <b>Alibaba Container Services for Kubernetes [ACK]*</b>	<p>Container Service [ACK] provides high-performance, scalable, and enterprise-class management services for Kubernetes containerised applications throughout the application lifecycle.</p> <p>ACK simplifies the deployment and scale-out operations of Kubernetes clusters and integrates ALP Cloud capabilities of virtualisation, storage, networking, and security. Based on these capabilities, ACK provides an ideal runtime environment for Kubernetes-based containerised applications. Alibaba Cloud is a Kubernetes-Certified Service Provider [KCSP].</p>
		<b>Auto Scaling [ESS]*</b>	<p>Auto Scaling automatically adjusts your elastic computing resources based on your business requirements, and policies that you define when demand for services spikes. Auto Scaling automatically scales out Elastic Compute Service [ECS] instances based on your configurations to maintain sufficient computing resources.</p> <p>When demand for services drops, Auto Scaling automatically scales in ECS instances to save costs.</p> <p>Auto Scaling provides the following features: Horizontal Scaling (scale-out and scale-in of ECS resources); and Elastic Recovery of instances that have failed. Auto Scaling does not provide vertical (scale-up or scale down) capability.</p>
		<b>Resource Orchestration Service [ROS]*</b>	<p>Resource Orchestration Service [ROS] is a service provided by Apsara Stack to simplify the management of cloud computing resources. You can author a stack template based on the template specifications defined in ROS. In the template, you can define required cloud computing resources, such as Elastic Compute Service [ECS] and ApsaraDB RDS instances, and the dependencies between resources. The ROS engine automatically creates and configures all resources in a stack based on the template. This helps achieve automatic deployment and O&amp;M.</p> <p>An ROS template is a readable, easy-to-author text file. You can directly edit a JSON template or use version control tools, such as Apache Subversion [SVN] and Git, to manage the template and infrastructure versions. You can call APIs and use SDKs to integrate the orchestration capabilities of ROS with your applications to implement Infrastructure as Code [IaC].</p>
	Storage	<b>Elastic Block Storage [EBS]</b>	<p>Block storage provides Elastic Block Storage [EBS] devices based on a distributed storage architecture. EBS is a persistent random block storage service with low latency and high reliability and is designed for Elastic Compute Service [ECS].</p> <p>The EBS console provides an all-in-one, cloud-based management solution for EBS. You can use the EBS console to manage enterprise-level features and other features such as storage resource management, monitoring, performance analysis, disaster recovery, and alerting. As a centralised service platform for the entire EBS infrastructure, the EBS console informs you of resources in the cloud to best support business and optimise costs by analysing long-term data trends.</p>
		<b>Object Storage Service [OSS]</b>	<p>Object Storage Service [OSS] is a secure, cost-effective, and highly reliable cloud storage service provided by ALP Cloud.</p> <p>Compared with user-created server storage, OSS has outstanding advantages in reliability, security, cost-effectiveness, and data processing capabilities. OSS enables you to store and retrieve a variety of unstructured data objects, such as text, images, audios, and videos over networks anytime.</p> <p>OSS is an object storage service based on key-value pairs. Files uploaded to OSS are stored as objects in buckets. You can obtain the content of an object based on the object key.</p>
		Network	<b>Virtual Private Cloud [VPC]*</b>
	<b>Elastic IP [EIP]</b>		<p>An elastic IP address [EIP] is a public IP address that you can purchase and use as an independent resource. You can associate an EIP with an Elastic Compute Service [ECS] instance, an internet-facing Server Load Balancer [SLB] instance, or a secondary elastic network interface [ENI] deployed in a virtual private cloud [VPC]. You can also associate an EIP with a NAT gateway or a high-availability virtual IP address [HAVIP].</p> <p>An EIP is a NAT IP address provisioned in the internet-facing gateway of ALP Cloud and is mapped to the associated cloud resource by using NAT. After an EIP is associated with a cloud resource, the cloud resource can use the EIP to communicate with the internet.</p>
	<b>Server Load Balancer [SLB]</b>		<p>Server Load Balancer [SLB] distributes inbound network traffic across multiple Elastic Compute Service [ECS] instances that function as backend servers based on forwarding rules. You can use SLB to improve the responsiveness and availability of your applications.</p> <p>After you attach ECS instances that are deployed in the same region to an SLB instance, SLB uses virtual IP addresses [VIPs] to virtualise these ECS instances into backend servers in a high-performance server pool that ensures high availability. Client requests are distributed to the ECS instances based on forwarding rules.</p> <p>SLB checks the health status of the ECS instances and automatically removes unhealthy ones from the server pool to eliminate single points of failure [SPOFs]. This enhances the resilience of your applications.</p>
<b>Threat Detection Service [TDS]*</b>	<p>Threat Detection Service [TDS] collects network traffic and server information and detects possible vulnerability exploits, intrusions, and virus attacks based on machine learning and data modelling. This module also provides up-to-date information about ongoing attacks to help you monitor the security status of your business.</p>		
Security	Security	<b>Traffic Security Monitor*</b>	<p>The Network Detection and Response module is deployed on the network perimeter of Apsara Stack. This module allows you to inspect and analyse each inbound or outbound packet of an Apsara Stack network, based on traffic mirroring. The analysis results are used by other Apsara Stack Security modules.</p>
		<b>Server Guard</b>	<p>Provides security features to protect Elastic Compute Service [ECS] instances. The features include vulnerability management, baseline check, intrusion detection, and asset management. To do this, the module performs operations such as log monitoring, file analysis, and signature scanning.</p>
Developer Services	Developer Services	<b>CloudMonitor*</b>	<p>CloudMonitor provides real-time monitoring, alerting, and notification services for resources to protect your business. In the CloudMonitor console, cloud services such as ECS, Server Load Balancer, Object Storage Service, Elastic IP Address, etc. are supported. You can use the metrics of cloud services to configure alert rules and notification policies. This way, you can stay up to date on the status and performance of your instances and scale resources at the earliest opportunity when resources are insufficient.</p>

**Note**  
 \* Non-chargeable product – Products that are marked with a \* are not themselves chargeable, however the resources which they use and/or create may be chargeable. For example, Auto Scaling [ESS] is not itself chargeable, but the additional ECS and EBS instances that it creates are chargeable.

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 Adapted from the Alibaba Cloud Apsara Stack Enterprise – Product Introduction manual, v3.16.2 dated 2023-07-14.