



## WHAT IS ALIBABA CLOUD ZSTACK?

Alibaba Cloud ZStack is one of the first hybrid cloud platforms in the industry to realize network interconnection in both the control plane and the data plane. It can be used in various scenarios such as Network Interconnection, Disaster Recovery, Unified Hybrid Cloud Management, One-Click Cloud Migration, Security and Protection, and Public Cloud Value-added Services.

Alibaba Cloud ZStack offers private cloud environments with four key advantages: Simple, Strong, Scalable, and Smart (4S) as well as industry-leading, secure, and stable public cloud, which provides a series of seamless hybrid cloud solutions in the approach of Cloud + Edge.

Alibaba Cloud ZStack is the next-generation open-source cloud computing Infrastructure as a Service (IaaS) software. Designed for intelligent data centres of the future, it provides a complete set of APIs to flexibly manage resources such as computing, storage, and networks. You can use it to set up various cloud environments, such as Platform as a Service (PaaS) and Software as a Service (SaaS).



## ALIBABA CLOUD ZSTACK AIMS TO:



Provide a Hybrid Cloud Platform to Connect IT Resources Anywhere and Anytime.



Provide a Hybrid Cloud Platform Based on Scenarios.



Provide a Hybrid Cloud Platform Easy to Use.



Provide a Hybrid Cloud Platform for Seamless Experience.





## ADVANTAGES



### EASY TO DEPLOY

- Directly downloads the installation package from the official website.
- Completes the deployment from a baremetal server to a ready cloud platform in 30 minutes. Enables one-click smooth upgrade in 5 minutes.



### AUTOMATED O&M

- Provides Restful APIs that cover the functions of the private cloud platform.
- Provides SQL-like query APIs to query all resources with millions of combined conditions.
- Automatically pushes backend messages.



### SECURE AND CONTROLLABLE

- Supports L2 VLAN/VXLAN isolation.
- Provides security groups to protect your VM network from malicious attacks.
- Provides three levels of permission management (admin-level, account-level and user-level) and resource isolation.



### STABLE AND RELIABLE

- Provides high availability for VM instances.
- Provides high availability for management nodes.
- Ensures the computing, network, and storage services of a VM instance to work properly if the corresponding management node is disconnected.
- Supports network bonding.



## OUTSTANDING PERFORMANCE

- Manages 10,000+ hosts and 100,000 VM instances on a single management node.
- Processes 10,000+ concurrent API requests per second.
- Creates 100+ VM instances in minutes.



## EXCELLENT & DIVERSIFIED FEATURES

- ImageStore: Quickly creates and allocates images like Docker does.
- Multi-tenant quota and billing: Provides enhanced self-service capability of the private cloud platform.
- Startup sequence adjustment: Allows you to reinstall your VM instances or recover your VM instances by using ISO images.
- Resource tagging and locating: Tags the resource name, description, and users for easier query.
- Resource delayed deletion: Moves deleted resources to the recycle bin for delayed deletion.
- Resource overcommitting: Allows you to overcommit resources such as the CPU, memory, and primary storage.
- Resource bandwidth limitation: Allows you to set thresholds for the network uplink/down-link and disk bandwidth of your VM instances.
- Load balancing: Balances the distribution loads and allocates the resources, ensuring applications to run smoothly.
- Heterogeneous resource management: Takes over VMware vCenter and supports multiple operations on VM instances, volumes, and network services.
- Network topology: Allows you to display the global network topology or the custom network topology as needed.
- Large-screen monitoring: Monitors and displays the resource capacity, resource loads, and performance status of the private cloud data centre in real time.



## HYBRID CLOUD



### DEPLOYMENT SCENARIO

- You can deploy part of your businesses in the public cloud and part in the private cloud.



### DEPLOYMENT METHOD

- You can deploy a private cloud platform by using ZStack and register necessary Alibaba Cloud accounts before startup.
- The private cloud network is connected to Alibaba Cloud VPC through IPsec, leased lines, or SD-WAN.
- The management node manages both private cloud resources and Alibaba Cloud resources by using the interconnected networks in the control plane.



### OPERATION METHOD

- You can directly operate on the UI of Alibaba Cloud ZStack.



## SIX APPLICATION SCENARIOS

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### NETWORK INTERCONNECTION

- Alibaba Cloud ZStack seamlessly connects your private cloud businesses and public cloud businesses for flexible resource scheduling.
- You can deploy your businesses either in the private cloud or the public cloud as needed. In addition, Alibaba Cloud ZStack links the isolated and fragmented IT resources in the public cloud.
- Local business clusters and public cloud business clusters are connected through the hybrid cloud network interconnection.



### DISASTER RECOVERY

- A traditional disaster recovery solution is expensive and time-consuming. Many enterprises hesitate to establish their remote data centre for disaster recovery due to limited budgets.
- With Alibaba Cloud ZStack, you can encrypt and back up data to the public cloud storage. You will pay only what you use, implementing remote disaster recovery in the public cloud with no worries about scaling up.
- Encrypt and back up private cloud data to the public cloud storage.



### UNIFIED HYBRID CLOUD MANAGEMENT

- Traditionally, the private cloud and the public cloud cannot be connected through APIs, making it hard to implement unified management both online and offline.
- With Alibaba Cloud ZStack, you can manage both the private cloud and the public cloud at the same time by integrating services of Alibaba Cloud into ZStack on a unified management platform both online and offline.



## ONE-CLICK CLOUD MIGRATION

- Traditionally, businesses cannot be flexibly migrated between the private and the public clouds due to lack of network interconnection in the data plane.
- With Alibaba Cloud ZStack, you can migrate your businesses between the private and the public clouds without business interruption.



## SECURITY AND PROTECTION

- Traditionally, the private cloud and the public cloud are secured separately, making it hard to secure these two clouds in a unified way. In addition, it might cause overlapping investments and construction cost.
- With Alibaba Cloud ZStack, you can secure the private cloud and the public cloud online and offline on a unified management platform. The functions of Anti-DDoS Premium, vulnerability scanning, and virus protection provided by Alibaba Cloud ZStack ensures the closed loop security between the private and the public clouds by discovering and solving security issues with one-click vulnerability repair and virus isolation.
- Private cloud for sensitive data storage
- Public cloud for Anti-DDoS



## PUBLIC CLOUD VALUE-ADDED SERVICES

- Traditionally, the private cloud cannot provide the value-added services that the public cloud has. To use the value-added services of the public cloud, you must manually create virtual machines in the public cloud and then deploy your businesses in the virtual machines.

With Alibaba Cloud ZStack, you can use the network interconnection to directly migrate the value-added services. You can also migrate local businesses to Alibaba Cloud to obtain the richfull value-added services, such as DataV, RDS, and Anti-DDoS Premium. In this way, you can reduce the second development in the private cloud and meet your specific business demands.



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