Alibaba Cloud Financial Service Solutions

Enabling financial institutions to build next-generation architecture with low costs and high availability.

Introduction

Alibaba Cloud Financial Service Solutions enable financial service institutions such as consumer banks, payment, securities, capital markets, insurance, etc., to build the next generation architecture with low cost and high availability. It is based on highly available cloud infrastructure, diverse set of cloud products, and professional cloud services. Powered by big data platforms and AI technologies, it provides customized solutions for risk modeling, data management, security, face recognition, and universal financial related scenarios.

Highlights

- Scalable application server
- Leverages Anti-DDoS/WAF to fulfill security requirements
- Direct Cloud Entrust IDC access
- Controllable network delay
- Includes financial public cloud, financial cloud, and financial private cloud models

Securities and Financial Platform

Overall Architecture

Leveraging Alibaba Cloud’s various resources and products, together with the Cloud Entrust service provided by Alibaba Cloud, customers can build an Internet-oriented application system. This includes additional security layers such as WAF, Anti-DDoS protection, VPC, and security groups. The solution provides organizations with an easy to use service to set up scalable and highly available application infrastructure such as Server Load Balancer, ECS, and CDN. Together, these elements help to improve user experience by reducing latency. Express Connect service allows businesses to use their on-premise services without using the public Internet, thus enhancing the overall security. Subsequently, organizations can meet their enterprise-grade requirement.

Recommended Solution Architecture

FSIs can use the solution to:

- Meet auditing requirements for the core servers of securities and financial firms.
- Fulfil connection requirement to SDNET.
- Ensure regulatory requirement to the core database on the cloud.
- Leverage Anti-DDoS/WAF to fulfil the security requirements.
- Significantly enhance scalability and availability of application servers to 100 VMs in 15 minutes.
Overall Business Architecture - Ensuring the Safety and Availability of FSIs

FSIs are one of the primary targets of cyber-attacks such as DDoS, phishing, and malware. Additionally, financial organizations need to ensure the availability and scalability of their applications to prevent operational, financial, and reputational losses. It is here that Alibaba Cloud Financial Service seeks to cater to these issues in the most effective manner.

Cloud Entrust IDC provided by Alibaba Cloud stores SDNET network, core database, and leased line to other FSIs and systems required for regular auditing. Furthermore, the Cloud Entrust IDC is connected to the cloud environment with Express Connect. (You can control the network delay in ms level.)

Recommended Solution Architecture

- The end user passes through Alibaba Cloud local data scrubbing center, which is protected by Alibaba Cloud Anti-DDoS and WAF. Subsequently, WAF forwards the requests to Server Load Balancer.
- Includes a scalable Application Server (ECS Web) that receives requests from the Server Load Balancer. Security groups control the entire traffic flow to Application Server.
- VSwitch provides the network reachability for multiple application servers running in different availability zones and subnets within VPC.
- ECS Web requests to access the core database and goes to the Cloud Entrust IDC directly through Express Connect and leased lines.
- Dedicated servers and networks allow users to facilitate third-party auditing requirement by using IDC with Cloud Entrust service.