Introduction

Each day there are many small companies and startups launching their e-commerce operations. Often backed by venture capital or private savings, these businesses seek to build innovative and user-friendly platforms. They also require a secure and scalable infrastructure at a minimal cost.

Background

Small scale e-commerce businesses face their own set of challenges. In most cases they need a basic web hosting service to host their platform with a scalable infrastructure to handle traffic which is about 1,000 to 10,000 page views/day. Their typical requirement is a setup that consists of efficient database systems to handle order volume up to 1,000 orders/day with minimal upfront costs and convenient operations and maintenance services.

Recommended Solution Architecture

This architecture diagram demonstrates a typical cloud solution for a small scale e-commerce setup.

Alibaba Cloud Web Application Firewall (WAF) in combination with Server Guard and Situational Awareness ensure protection against common cyber-attacks including DDoS attacks. This includes providing intrusion prevention and security management for servers and detecting potential intrusion and attack threats by using machine learning and data modeling. This also includes innovative server security solutions for added protection. CloudMonitor then monitors resources and Internet applications, detects service availability and sets alarms for metrics. CloudMonitor gives customers a comprehensive understanding of usage, performance and the operating status of their Alibaba Cloud resources. Server Load Balancer eliminates any single-point-of-failure (SPOF) and ensures system stability during situations of high concurrency. The service scales ECS instances dynamically to respond to changing traffic needs. Alibaba Cloud's RDS stores structured data. The active/standby RDS architecture prevents SPOFs in various task areas, including orders, inventories, promotions, and other core data items.

Highlights

- Highly secure infrastructure
- Automated Scaling to handle fluctuating traffic
- Elimination of SPOFs
- Minimal upfront costs and flexible payment models

Benefits

- Choose from 13 global regions, single global account
- Quick deployment of infrastructure through a user-friendly console
- Ensured operational stability
- Accelerated website and minimum latency across global regions
- Convenient Operations & Maintenance, with 24/7 professional support