

# Cloud to Drive the E-commerce Evolution

Comprehensive cloud solutions to advance medium sized e-commerce businesses.

## Introduction

When small operators grow into mid-size e-commerce enterprises, they feel the need to ramp up their platform capacity and introduce additional features without compromising user functionality. A mid-sized e-commerce set up usually experiences an average daily traffic of 10,000 to 100,000 page views and an order volume ranging between 1,000-10,000 orders/day.

## Background

Often, the increased traffic volume needs to be handled through automated server provisioning. Auto Scaling is also required as new features keep on getting added. During major promotions, discount periods or festive seasons, e-commerce enterprises may experience a major increase in traffic. Even short downtime during such periods can significantly affect transactions and the user experience. Business growth also leads to a more complex backend infrastructure and therefore companies need a reliable and scalable data storage service to address increasing storage requirements, especially during peak hours. E-commerce websites are naturally prone to cyber-attacks, malicious logins, fraudulent, or unauthorized transactions and pagejacking.

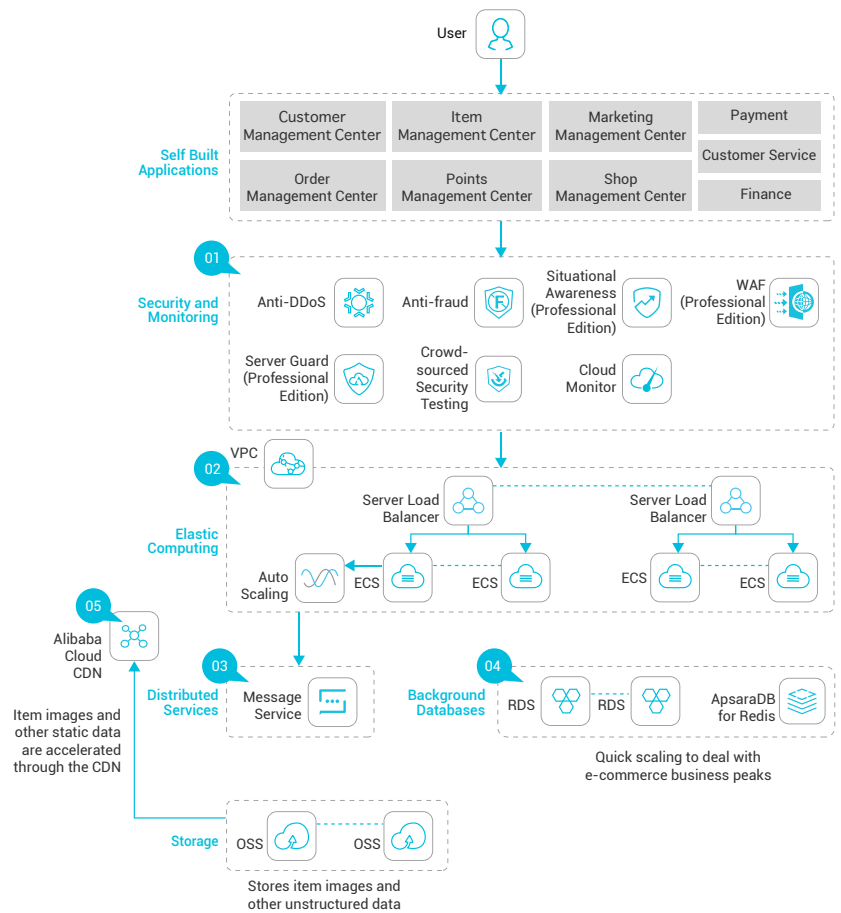
## Highlights

- ↑↓ Vertical scaling to address data expansion needs
- 🔧 Easy management and decoupling of application modules
- 📶 Minimal latency through CDN
- 🔒 Highly secure infrastructure

## Benefits

- ✓ Choose from 13 global regions, single global account
- ✓ Suite of security and anti-fraud services against attacks and threats
- ✓ Automated scaling to handle massive and fluctuating traffic
- ✓ Accelerated website and minimum latency across global regions

## Recommended Solution Architecture



This architecture diagram illustrates an archetypal cloud solution for a medium-size e-commerce setup.

Cyber security solutions and anti-fraud services protect businesses against cyber-attacks, malicious order placement, and scams. Anti-DDoS works with CDN to ensure security and acceleration. Server Load Balancer distributes traffic among healthy instances and, eliminates SPOFs ensuring system stability during high concurrency. Auto Scaling dynamically scales ECS instances to meet changing business needs and effectively deals with promotional activities and other business peaks. Also, VPC helps e-commerce enterprises construct isolated network environments. Distributed Message Service handles large-scale e-commerce with high-reliability and high-concurrency. OSS provides high-volume cloud storage service that can be elastically scaled as required. It processes massive volumes of images through image processing, audio and video transcoding, and other data processing capabilities. It also seamlessly integrates with CDN for accelerated content delivery. To address latency issues, ApsaraDB for Redis provides online cache services, giving fast response to product and other popular data. The active/standby RDS architecture also prevents SPOFs.