Web Application Hosting

A resilient, scalable and cost-effective cloud infrastructure for hassle-free web hosting

Background

Developing and deploying a scalable, globally-available web application on conventional data centers involves a lot of manual efforts which hamper time, efficiency and return on investments (ROIs). High peaks and oscillating traffic lead to either under-provisioning or over-provisioning of resources.

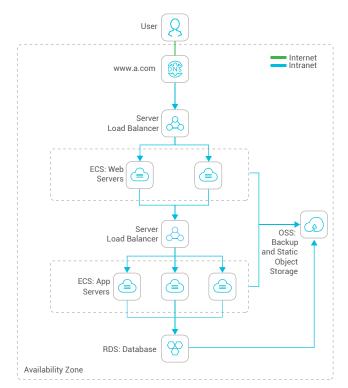
Highlights

- (👹) Hassle-free deployment
- (SC) On-demand provisioning of servers
- 🚯 No single-point-of-failure (SPOF)
- 🕤 Multi-layered security protection

Benefits

- Zero downtime through multiple data centers in a region
- Reduced cost of managing database infrastructure using scalable Relational Database Service
- ✓ Easy management of oscillating traffic peaks using Server Load Balancing service
- ✔ High security of your web applications through a pool of inherent security services

Recommended Solution Architecture



This architecture diagram illustrates a typical web application hosting architecture using Alibaba Cloud services. As soon as a user request is received on your website, it is served by the nearest Alibaba Cloud DNS server, which resolves the domain name and automatically routes it to the infrastructure running in Alibaba Cloud services. The user request is then handled by the mapped Server Load Balancer, an on-demand web traffic distribution service, which automatically distributes incoming application traffic among multiple Elastic Compute Service (ECS) instances in a round robin manner. Both application and web servers are hosted on scalable ECS instances provisioned in multiple availability zones. To store and manage relational data, application servers are connected to ApsaraDB for RDS databases, with an additional set of features including disaster recovery, database backup, monitoring, and migration. All database backup archive files, root location backup and log files of the web servers are stored in scalable Object Storage Service, which scales up or down automatically ensuring no disruption of services.