Alibaba Cloud

Alibaba Cloud DSP Platform Solution

Deliver accurate and relevant advertising solutions with Alibaba Cloud Demand-Side Platform (DSP)

Introduction

Alibaba Cloud Demand-Side Platform (DSP) solution makes it possible for organizations to deliver accurate and relevant advertising solutions using scalable infrastructure and a large-data computing capability. This ensures a prompt and well-targeted content distribution.

Background

For organizations, staying a step ahead of their competitors translates to delivering customer services and goods that stand apart from the rest. This makes the understanding of customers and their buying patterns, and then delivering a corresponding service or product even more vital. While advertising, organizations have to be sure of offering an enhanced display campaign, facilitating real time bidding, advanced customer targeting, and transparent data analysis.

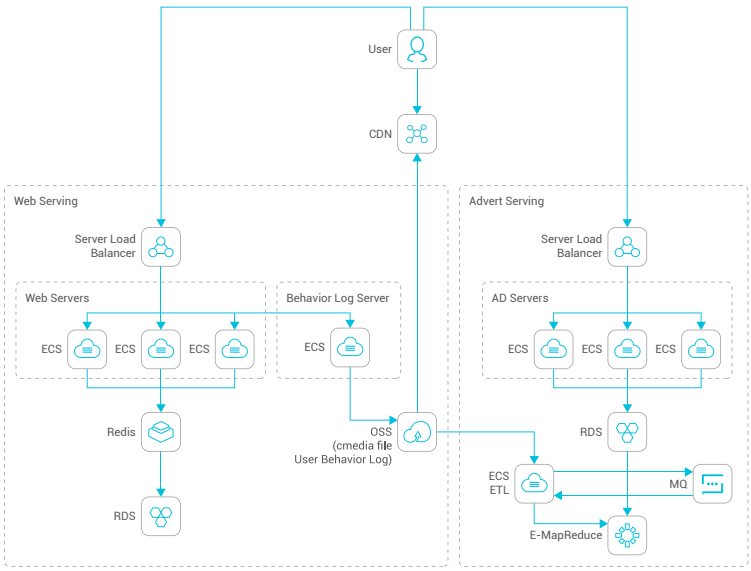
Highlights

- Automatic elastic scale-out
- Automatic provisioning of Hadoop and Spark service
- Automatic failover of Map-Reduce cluster
- Economically viable storage solutions

Benefits

- ✓ Fetch rapid updates to marketing websites based on user behavior, customer feedback or competitor moves
- ✓ Facilitate offline calculations and other online data in the ApsaraDB for RDS database
- ✓ Maintain computing cluster using E-MapReduce
- ✓ Reduce storage costs with the help of OSS

Recommended Solution Architecture



The above diagram visualizes Alibaba Cloud DSP Solution, which is capable of fetching rapid updates to marketing websites based on user behavior, customer feedback or competitor moves. It also integrates them into the advertisements that users see.

Organizations can use Server Load Balancer and Elastic Compute Service (ECS) while displaying advertisements. Furthermore, businesses can store the user access behavior log in Object Storage Service (OSS) for subsequent offline calculations and other online data in the ApsaraDB for RDS database.

Additionally, businesses can store pictures, videos, and other static resources in the web server with OSS to reduce storage costs. Once stored, it is possible to use Alibaba Cloud Content Delivery Network (CDN) to accelerate those static resources. CDN also has the capability to push and pull resources from OSS directly, effectively reducing the latency of content delivery to the user.

Based on our Hadoop and Spark cluster for offline calculation, and E-MapReduce service, the system sends results from the online data back to the ApsaraDB for RDS database. E-MapReduce service helps users to maintain cluster scale-out and node failover operations. It is possible to release the cluster at any time after the calculation of resources while storing the calculated data in the OSS to reduce the cost of temporary calculation.

Alibaba Cloud also provides the NAT gateway service to help DSP implement SNAT and source data for third parties. Moreover, it pushes insights on advertiser data to the visitor based on the results of an offline calculation.