Web hosting

Overview

WordPress is widely used on websites around the world to allow you to create a website quickly and easily using a variety of themes and plugins. To run this content management system (CMS), a LAMP environment, which stands for Linux, Apache Web Server, MySQL, and PHP, is essential.

This document describes the architecture needed for quick and easy configuration of a WordPress environment and building/hosting a website using **Virtual Server** and **DB Service** from SDS Cloud.

Architecture Diagram

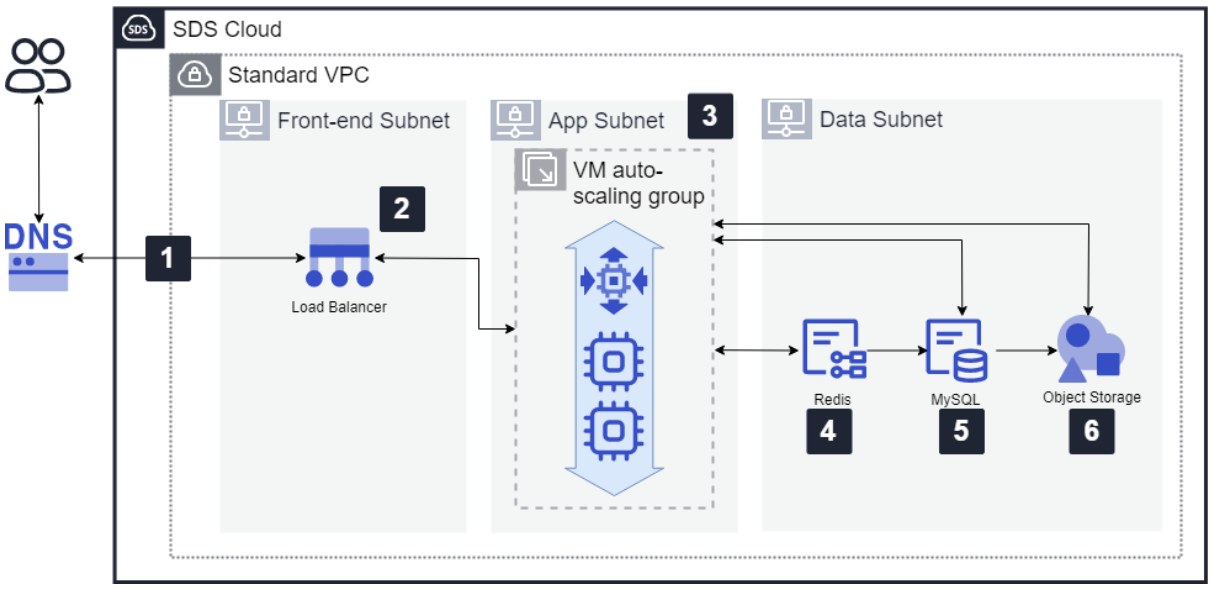

Figure 1. WordPress configuration using SDS Cloud service

1. Standard **VPC** provides a connection between the **Virtual Server** and the Internet.
2. **Load Balancer** distributes web request traffic to **VM Auto-Scaling** groups.
3. Create a **Virtual Server** or **VM Auto-Scaling** group in the app subnet then select and run Linux images. Install the latest version of WordPress, Apache web server, PHP 7, and OPcache.

4. If the database read load is high, configure the **Redis** service in the frontend of the database to provide frequently called data as a cache.
5. Configure **DB service** by selecting MySQL as the database engine.
6. Configure a **Virtual Server** to share WordPress data (php files, settings, plugins, etc.) using **Object Storage** service.

Use Cases

A. Quickly start web hosting without burden of hardware investment

With SDS Cloud services, you can build resources easily and pay only for how much you use, without the cost of hardware investment and a long lead time.

B. Web service infrastructure that can respond flexibly to usage changes

If usage is expected to be concentrated in a specific period, it is possible to actively respond by horizontal/vertical expansion of resources, using **VM Auto-Scaling** and **Virtual Server**.

Pre-requisites

None

Limitations

The targets that are auto-scaled through **VM Auto-Scaling** are limited to **Virtual Server** resources and do not apply to other services (e.g. Bare Metal Server).

Considerations

A. Securing web server security

SDS Cloud provides cloud security solutions for the servers open to the Internet. The **WAF** service monitors website traffic to detect and block attacks, while **DDoS Protection** service detects and blocks DDoS attacks that intensively induce traffic to the servers and neutralize the service. **Web Vulnerability Assessment** service can check potential vulnerabilities of web pages with a scanner.

B. Notes on applying **VM Auto-Scaling**

File Storage is not supported for virtual servers created by VM Auto-Scaling. If files need to be shared with Auto-Scaling Group servers, a file sharing method using Object Storage is recommended.

Related Products

- Virtual Server
- VM Auto-Scaling
- DB Service
- VPC
- Load Balancer
- Object Storage

Related Documents

- Virtual server-based DMZ web service using standard VPC