Container Service

Best Practices

Best Practices

Volume

Use OSSFS data volumes to share WordPress attachments

This document describes how to share WordPress attachments among different containers by creating OSSFS data volumes on Alibaba Cloud Container Service.

Scenario

Docker containers simplify WordPress deployment. With Alibaba Cloud Container Service, you can use an application template for one-click deployment of WordPress.

> **Note:** For details about how to use Alibaba Cloud Container Service to create a WordPress application, refer to Create WordPress by using an application template.

In this example, the following application template is used to create an application named **wordpress**.

```
web:
image: registry.aliyuncs.com/acs-sample/wordpress:4.3
ports:
- '80'
environment:
WORDPRESS_AUTH_KEY: changeme
WORDPRESS_SECURE_AUTH_KEY: changeme
WORDPRESS_LOGGED_IN_KEY: changeme
WORDPRESS_NONCE_KEY: changeme
WORDPRESS_AUTH_SALT: changeme
WORDPRESS_SECURE_AUTH_SALT: changeme
WORDPRESS_LOGGED_IN_SALT: changeme
WORDPRESS_NONCE_SALT: changeme
WORDPRESS_NONCE_AA: changeme
restart: always
links:
```

```
- 'db:mysql'
labels:
aliyun.logs: /var/log
aliyun.probe.url: http://container/license.txt
aliyun.probe.initial_delay_seconds: '10'
aliyun.routing.port_80: http://wordpress
aliyun.scale: '3'
db:
image: registry.aliyuncs.com/acs-sample/mysql:5.7
environment:
MYSQL_ROOT_PASSWORD: password
restart: always
labels:
aliyun.logs: /var/log/mysql
```

This application consists of a MySQL container and three WordPress containers (aliyun.scale: '3' is the extension label of Alibaba Cloud Container Service, and specifies the number of containers. For details about the labels supported by Alibaba Cloud Container Service, refer to Label description). The WordPress containers access MySQL through a link. The aliyun.routing.port_80: http://wordpress label defines the load balancing among the three WordPress containers (for details, refer to Exposing HTTP service through acsrouting).

In this example, the application can be deployed with complete features. However, the attachments uploaded by WordPress are stored in the local disk, which means they cannot be shared across different containers or opened once requests are routed to other containers.

Solution

This document describes how to use OSSFS data volumes on Alibaba Cloud Container Service to share WordPress attachments across different containers without any code modifications.

OSSFS data volume is a third-party data volume provided by Alibaba Cloud Container Service to package various cloud storages (for example, OSS) into data volumes and to directly mount these data volumes to the containers. This means the data volumes can be shared across different containers and automatically re-mounted upon container restart and migration.

Operating procedure

Step 1: Create OSSFS data volumes

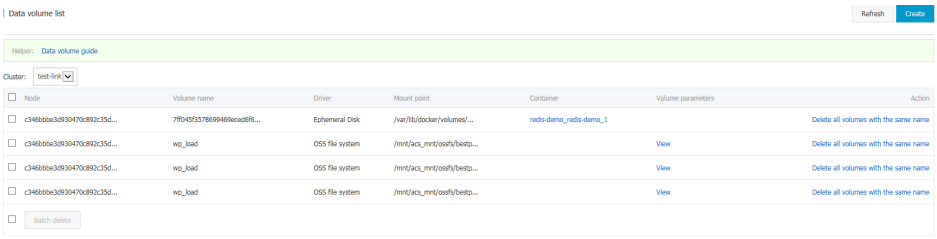
Log on to the Container Service console.

Click **Data Volumes** in the left navigation pane.

Select the desired cluster and click **Create** in the upper-right corner.

For details about how to create OSSFS data volumes, refer to **Create an OSSFS data volume**.

Here the created OSSFS data volumes are named **wp_upload**. The Container Service uses the same name to create data volumes on all nodes of a cluster.



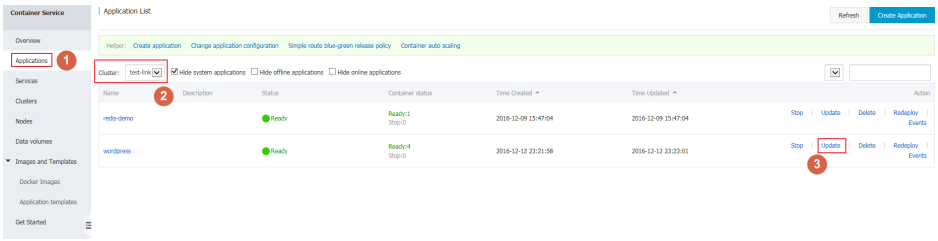
Step 2: Use the OSSFS data volumes

The WordPress attachments are stored in the /var/www/html/wp-content/uploads directory by default. In this example, we only need to map OSSFS data volumes to this directory for sharing of an OSS bucket across different WordPress containers.

Log on to the **Container Service console**.

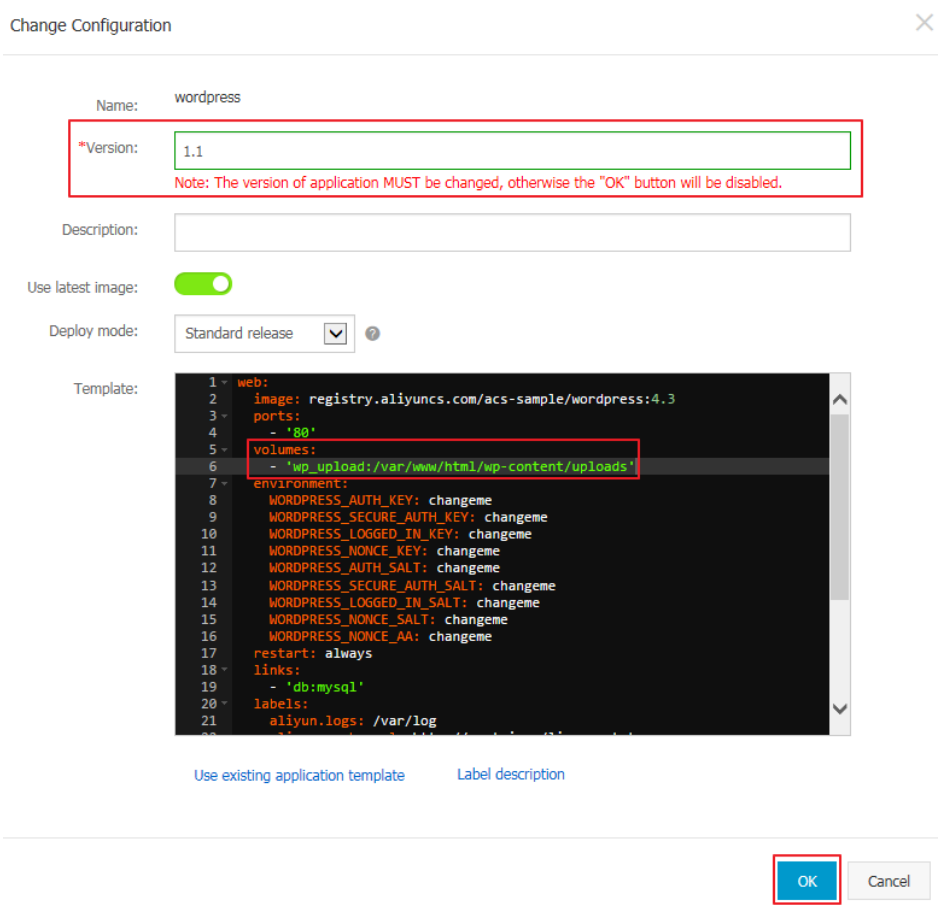
Click **Applications** in the left navigation pane.

Select the target cluster as well as the created application **wordpress** and click **Update** at the right side.



In **Template**, add the mapping of OSSFS data volumes to the WordPress directory.

> **Note:** You must modify the **Version**; otherwise, the application cannot be re-deployed.



Click **OK** to re-deploy the application.

Open WordPress and upload attachments. Then you can see the uploaded attachments in the OSS bucket.