

Alibaba Cloud Migration Guide

AWS to Alibaba Cloud Web Hosting Migration Guide

Issue: 20200508









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Document conventions

Style	Description	Example
	A danger notice indicates a situation that will cause major system changes, faults, physical injuries, and other adverse results.	 Danger: Resetting will result in the loss of user configuration data.
	A warning notice indicates a situation that may cause major system changes, faults, physical injuries, and other adverse results.	 Warning: Restarting will cause business interruption. About 10 minutes are required to restart an instance.
	A caution notice indicates warning information, supplementary instructions, and other content that the user must understand.	 Notice: If the weight is set to 0, the server no longer receives new requests.
	A note indicates supplemental instructions, best practices, tips, and other content.	 Note: You can use Ctrl + A to select all files.
>	Closing angle brackets are used to indicate a multi-level menu cascade.	Click Settings > Network > Set network type .
Bold	Bold formatting is used for buttons, menus, page names, and other UI elements.	Click OK .
Courier font	Courier font is used for commands.	Run the <code>cd /d C:/window</code> command to enter the Windows system folder.
Italic	Italic formatting is used for parameters and variables.	<code>bae log list --instanceid Instance_ID</code>
[] or [a b]	This format is used for an optional value, where only one item can be selected.	<code>ipconfig [-all -t]</code>

Style	Description	Example
{ } or {a b}	This format is used for a required value, where only one item can be selected.	switch {active stand}

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1 Overview

This guide describes how to migrate a website or app hosted in Amazon Web Services (AWS) to Alibaba Cloud. A WordPress website is used as an example here, although the same general procedure can be applied to most other Web hosting scenarios.

Before you migrate

Before you begin the migration procedure, first read the following topics:

- [Prerequisites](#)
- [Recommended architecture](#)
- [Product comparison with AWS](#)

Procedure

To migrate a WordPress website from AWS to Alibaba Cloud, follow these steps:

1. [Prepare your account](#)
2. [Redeploy services in Alibaba Cloud](#)
3. [Migrate compute service, database service, and storage service](#)
4. [Check results](#)
5. [Create a final custom image](#)
6. [Configure Auto Scaling](#)
7. [Configure DNS](#)
8. [Configure CDN](#)

2 Before you migrate

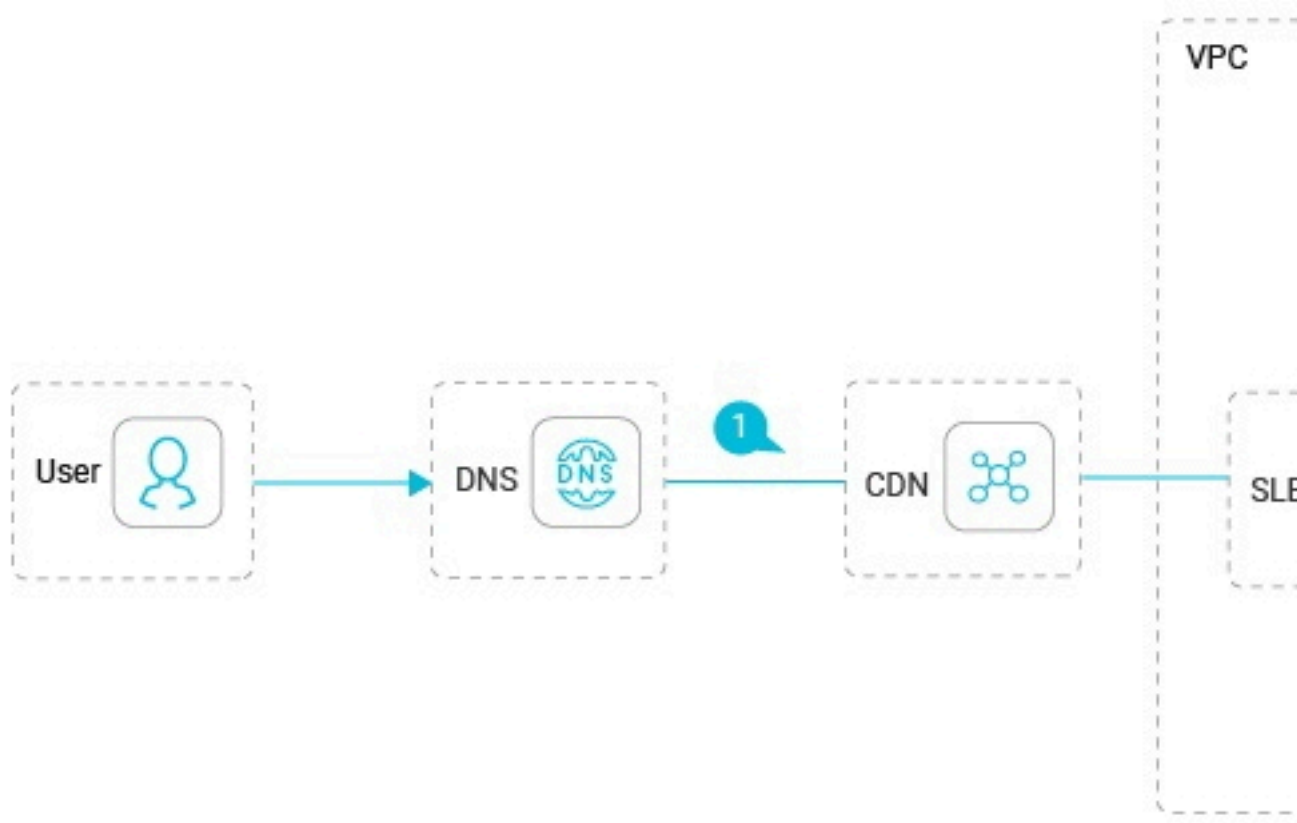
2.1 Prerequisites

You can follow the steps in this guide if your existing AWS architecture meets the following requirements:

- Your website is hosted entirely on AWS, and no data is on-premise.
- You have created a VPC and a security group for your cloud services.
- Your EC2 instances are running a Linux distribution, such as Ubuntu, CentOS, or Debian.
- You have the SSH user name and password for your EC2 instances.
- You have configured an Elastic IP address to combine the domain and public IP.
- You have chosen an appropriate database type and specifications based on your requirements.

2.2 Recommended architecture

For Web hosting in Alibaba Cloud, we recommend the following architecture.



1. CDN delivers static and dynamic content.
2. SLB distributes web traffic across to ECS instances in an Auto Scaling group.
3. ECS instances in an Auto Scaling group run the WordPress site.
4. RDS is used as the WordPress database.
5. OSS stores, backs up, and archives data.

For this architecture, the following Alibaba Cloud products and services are used:

- Elastic Compute Service (ECS)
- Virtual Private Cloud (VPC)
- Server Load Balancer (SLB)
- Auto Scaling
- ApsaraDB for RDS
- Object Storage Service (OSS)
- Alibaba Cloud DNS
- Content Delivery Network (CDN)

For pricing information about these products, see the [Pricing page](#).

2.3 Product comparison for Web hosting

This topic explains the mapping between the AWS products and services and Alibaba Cloud products and services used for a Web hosting scenario, and lists the strategy and tools required for the migration process.

AWS Products	Alibaba Cloud Products	Strategy	Tools
Amazon Virtual Private Cloud (VPC)	Virtual Private Cloud (VPC)	Re-apply and redeploy	N/A
Auto Scaling	Auto Scaling		
Elastic Load Balancing	Server Load Balancer (SLB)		
Amazon CloudFront	Content Delivery Network (CDN)		
Amazon Route 53	Alibaba Cloud DNS		
Amazon Elastic Compute Cloud (EC2)	Elastic Compute Service (ECS)	Re-apply and migrate	Alibaba Cloud Migration Tool
Amazon Relational Database Service (RDS)	ApsaraDB for RDS		Data Transmission Service (DTS)
Amazon Simple Storage Services (S3)	Object Storage Service (OSS)		OSSImport

3 Step 1: Prepare your account

Before you migrate to Alibaba Cloud, you need to complete the steps listed in this article.

Procedure

1. [Sign up for Alibaba Cloud](#).

**Note:**

In accordance with the legal requirements of the People's Republic of China, if you want to create an ECS instance in a region within mainland China, you must [register by using your real name](#).

2. [Bind your credit card or PayPal account](#) to your Alibaba Cloud account.

4 Step 2: Redeploy services

4.1 Redeployment overview

Before migrating any data, you must first create and configure the relevant products and services on Alibaba Cloud.

To redeploy your products and services, follow these steps:

1. [Create a VPC](#)
2. [Configure RDS](#)
3. [Configure SLB](#)
4. Configure OSS:
 - a. [Sign up for OSS](#)
 - b. [Create a bucket](#)

4.2 1. Create a VPC

Virtual Private Cloud (VPC) is a private network established in Alibaba Cloud. VPCs are logically isolated from other virtual networks in Alibaba Cloud. A VPC is needed before you migrate your AWS service to Alibaba Cloud.

Procedure

1. Log on to the [VPC console](#).
2. Select the region of the VPC.

The VPC and the cloud resources to deploy must be in the same region.

3. Click **Create VPC**, configure the VPC and the VSwitch according to the following information, and click **OK**.

Table 4-1: VPC configurations




Configuration	Description
Name	Enter the name of the VPC. The name can contain 2 to 128 characters. It must begin with English or Chinese characters and can contain numbers, hyphens (-) and underscores (_).
CIDR	Select the CIDR block of the VPC. Limitations on VPC CIDR blocks are as follows: <ul style="list-style-type: none">• You can use 192.168.0.0/16, 172.16.0.0/12, or 10.0.0.0/8, the three standard CIDR blocks and their subsets. If you want to use a subnet of a standard CIDR block as the IP address range, you must use API to create a VPC.• If you want to connect a VPC to another VPC or to a local network to build a hybrid cloud, we recommend that you use a subset of the standard CIDR blocks, and make sure that the network mask is no longer than /16.• If you only have one VPC and it does not need to communicate with your local network, you can use any of the standard CIDR blocks or their subnets. <div> Note: After the VPC is created, you cannot change its CIDR block.</div>

Table 4-2: VSwitch configurations

Configuration	Description
Name	Enter the name of the VSwitch. The name can contain 2 to 128 characters. It must begin with English letters or Chinese characters and can contain numbers, hyphens, and underscores.

Configuration	Description
Zone	Select the zone of the VSwitch. In a VPC, VSwitches in different zones can communicate with each other through the intranet.
CIDR	<p>Enter the CIDR block of the VSwitch. Note the following when specifying the VSwitch CIDR block:</p> <ul style="list-style-type: none">The CIDR block of the VSwitch can be the same as that of the VPC to which it belongs, or a subset of the VPC CIDR block. <p>For example, if the CIDR block of the VPC is 192.168.0.0/16, the CIDR block of the VSwitch in the VPC can be 192.168.0.0/16, 192.168.0.0/17, ..., till 192.168.0.0/29.</p> <div> Note: If the CIDR block of the VSwitch is the same as that of the VPC to which it belongs, you can only create one VSwitch in the VPC.</div> <ul style="list-style-type: none">The size of the subnet mask for the VSwitch can be from /16 to /29, and the VSwitch CIDR block can provide 8 to 65536 IP addresses.The first and last three IP addresses are reserved by the system. <p>For example, for the IP address range 192.168.1.0/24, IP addresses 192.168.1.0, 192.168.1.253, 192.168.1.254, and 192.168.1.255 are reserved by the system.</p> <ul style="list-style-type: none">Consider the number of cloud instances to be created in the VSwitch. Up to 15000 instances can be created in a VPC. <div> Note: After the VSwitch is created, you cannot change its CIDR block.</div>

4.3 2. Configure RDS

This topic describes how to create and configure RDS, which is a stable, reliable, and auto-scaling online database service.

Procedure

1. Log on to the [RDS console](#).
2. On the **Instances** page, click **Create Instance**.

3. Select **Subscription** or **Pay-As-You-Go** as the billing method. For more information about the billing method, see ApsarasDB for MySQL [Billing items and billing methods](#).

4. Select the instance configuration. The parameters are described as follows:

- Basic configuration
 - Region and zone: Select the region and zone in which the instance is located. Some regions support a single zone or multi-zone, while some regions support only a single zone. For more information about regions and zones, see [Regions and zones](#).

**Note:**

Products in different regions cannot intercommunicate through the intranet, and you cannot change the instance region after buying an instance. Therefore, be careful when selecting the region.

- Database engine: RDS supports MySQL, SQL Server, PostgreSQL, and PPAS. Different database types are supported in different regions. Verify with the actual interface while using this document.
- Version: The database version. Currently, RDS supports MySQL 5.7/5.6/5.5, SQL Server 2017/2016/2012/2008 R2, PostgreSQL 10/9.4, PPAS 10/9.3, and MariaDB 10.3. Different database versions are supported in different regions. Verify with the actual interface while using this document.
 - For the MySQL database, we recommend that you select MySQL 5.6 because it supports the TokuDB storage engine, which can save the storage cost by greatly reducing the space occupied by data files.
 - SQL Server 2008 R2 and SQL Server 2012 support different features. For more information, see Function differences between SQL Server 2008 R2 and SQL Server 2012 [Functions supported by different editions of SQL Server](#).
- Series: RDS instances support the Basic Edition, High-availability Edition, and Finance Edition. Different database versions support different series. Verify with the actual interface while using this document.
- Network type: RDS supports the classic network and virtual private cloud (VPC). VPC needs to be created beforehand. Alternatively, you can change the network type after creating instances. For more information, see [Set network type](#).
- Type: The CPU and memory occupied by the instance. The number of connections and maximum IOPS (measured respectively for read and write, up to double of the

benchmark with mixed read/write) vary depending on different types. For more information on instance specifications, see [Instance type](#) list.

- **Storage:** The storage space contains space for data, system files, binlog files, and transaction files.
- **Subscription time:** Set the duration of the subscription instance.
- **Quantity:** The number of instances with the same configurations to be purchased.

5. Click **Buy Now** to go to the **Confirm Order** page.



Note:

To buy multiple instances of different configurations, you can click Add To List for each instance type and click Batch Purchase.

6. Select **Product Terms of Service and Service Level Notice and Terms of Use**, and then:

- Click **Pay**, if the billing method of the instance is subscription.
- Click **Activate**, if the billing method of the instance is Pay-As-You-Go.

4.4 3. Configure SLB

This topic describes how to configure SLB, which is required to distribute incoming traffic among ECS instances and enhance application availability.

Procedure

1. Log on to the [SLB console](#).
2. In the left-side navigation pane, click **Instances > Server Load Balancer**, and click **Create SLB Instance** in the upper-left corner.
3. Configure the SLB instance according to the following information.

enhances application availability. Configuration	Description
Region	Select the region where the SLB instance is located. Note Make sure that the region of the SLB instance is the same as that of backend ECS instances.

enhances application availability. Configuration	Description
Zone Type	<p>Display the zone type of the selected region. The zone of a cloud product refers to a set of independent infrastructure and is usually represented by Internet data centers (IDCs). Different zones have independent infrastructure (network, power supply, air-conditioning and so on). Therefore, an infrastructure fault in one zone will not affect other zones. A zone belongs to a specific region, however, a single region may have one or more zones. SLB has deployed multi-zone in most regions.</p> <ul style="list-style-type: none">• Single zone: The SLB instance is deployed only in one zone.• Multi-zone: The SLB instance is deployed in two zones. By default , the instance in the primary zone is used to distribute traffic. If the primary zone is faulty, the instance in the backup zone will automatically take over the load balancing service.
Primary Zone	Select the primary zone for the SLB instance. The primary zone carries traffic in normal conditions.
Backup Zone	Select the backup zone for the SLB instance. The backup zone only takes over traffic when the primary zone is unavailable.
Instance Spec	<p>Select a performance capacity for the instance.</p> <p>The performance metrics vary by specification. For more information, see Guaranteed-performance instances.</p>
Instance Type	<p>Select the instance type based on your business needs. A public or a private IP address is allocated to the SLB instance based on the instance type. For more information, see SLB instance and network type.</p> <ul style="list-style-type: none">• Internet: An Internet SLB instance only provides an Internet IP and you can access the SLB service from the Internet.• Intranet: An intranet SLB instance only provides a private IP and you can only access the SLB service from the intranet.

enhances application availability. Configuration	Description
Network Type	If the selected instance type is Intranet, you have to select a network type for the instance. <ul style="list-style-type: none">• Classic network: The IP of the instance is allocated and managed by Alibaba Cloud in a unified manner.• VPC: The IP of the instance is allocated from the VSwitch CIDR block specified by you.
Purchase Quantity	Select the number of instances to create.

4. Click **Buy Now** and complete the payment.

4.5 4. Configure OSS

4.5.1 a. Sign up for OSS

To use Alibaba Cloud OSS, you must first activate it for your account.

Procedure

1. Go to the [OSS product details page](#).
2. Click **Buy Now**.
3. After OSS is activated, click **Management Console** to access the OSS console.

You can also click **Console** in the upper right of the [homepage](#), and then choose **Object Storage Service** from the left-side navigation pane after you log in.

4.5.2 b. Create a bucket

After activating OSS, you can create a bucket in the OSS console to store objects.

Procedure

1. Log on to the [OSS console](#).

2. Click **Create Bucket to open the **Create Bucket** dialog box.**

Create Bucket

?

Create a bucket

!

Note: **Storage class** and **region** are not changeable after the bucket is created.

Bucket Name

0/63

Naming rules:

1. Bucket name can contain lowercase letters, numbers, and hyphens.
2. Bucket name must begin and end with lowercase letters or numbers.
3. Bucket name must be 3-63 characters in length.

Region

China North 2 (Beijing)

▼

Products in the same region can intercommunicate via intranet. The region cannot be changed after purchase. Be careful when selecting the region.

Endpoint

oss-cn-beijing.aliyuncs.com

Storage Class

Standard Storage

Infrequent Access Storage

Archive Storage

Standard: High reliability, high availability, high performance, frequent access.

OK

Cancel

3. In the **Bucket Name text box, enter a bucket name.**

- The bucket name must comply with the naming conventions.
- The bucket name must be unique among all existing buckets in Alibaba Cloud OSS.
- The bucket name cannot be changed after being created.

4. In the **Region drop-down box, select the data center of the bucket.**

The region of a bucket cannot be changed after the bucket is created. To access OSS through the ECS intranet, select the same region as that of your ECS.

5. In the **Storage Class drop-down box, select a storage class for the bucket.**

- **Standard Storage:** provides highly reliable, highly available, and high-performance object storage services that support frequent data access.
- **Infrequent Access Storage:** suitable for data that is stored for a long term and infrequently accessed. Its unit price is lower than that of the Standard storage class.
- **Archive Storage:** suitable for storing archival data that requires long-term persistence (more than half a year). The data is infrequently accessed during the storage period and it may take about one minute to restore the data to a readable state. This storage class is suitable for storing archive data, medical images, scientific materials, and video footage for a long time period.

6. In the **ACL drop-down box, select an access permission option for the bucket.**

- **Private:** Only the owner of the bucket and the authorized users can perform read, write, and delete operations on the objects in the bucket. Other users cannot access objects in the bucket.
- **Public Read:** Only the owner of the bucket and the authorized users can perform write and delete operations on the objects in the bucket. Anyone (including anonymous access) can read the objects in the bucket.
- **Public Read/Write:** Anyone (including anonymous access) can read, write, and delete the objects in the bucket.



Notice:

The fees incurred by the bucket operations are borne by the bucket owner. Therefore, use Public Read and Public Read/Write permissions with caution.

7. Click **OK.**

5 Step 3: Migrate

5.1 Migration overview

After you redeploy your products and services in Alibaba Cloud, you can migrate the data of your WordPress website.

To migrate a WordPress website from AWS to Alibaba Cloud, follow these steps:

Migrate compute service

1. [Make sure your system meets the ECS migration requirements](#)
2. [Create a custom image from the AWS EC2 instance](#)
3. [Select an ECS configuration](#)
4. [Create ECS instances](#)
5. [Connect to the instances](#)

Migrate database

1. [Create migration task](#)
2. [Modify the configurations of the WordPress database](#)

Migrate storage

1. [Download and configure ossimport tool](#)
2. [Migrate data using ossimport tool](#)
3. [Mount OSS bucket to WordPress](#)

5.2 1. Migrate compute service

5.2.1 Migrate compute service overview

The following topics explain how to migrate AWS EC2 to Alibaba Cloud ECS by using the free Cloud Migration tool. For more information about the Cloud Migration tool, refer to [Cloud Migration tool for P2V and V2V](#).

To migrate your compute service to Alibaba Cloud, follow these steps:

1. [Make sure your system meets the migration requirements](#)
2. [Create a custom image from your AWS EC2 instance](#)
3. [Select your ECS instance configurations](#)

4. [Create ECS instances](#)
5. [Connect to the instances](#)

5.2.2 a. ECS migration requirements

In this guide, the Cloud Migration tool is used to migrate to ECS. This topic explains the requirements of the Cloud Migration tool.

Operating system requirements

The Cloud Migration tool supports the operating systems listed in the following table.

Windows	Linux
Windows Server 2003	Centos 5/6/7
Windows Server 2008	Ubuntu 10/12/14/16/17. Note that Ubuntu 18 is not officially supported. Migration on Ubuntu 18 may or may not be successful.
Windows Server 2012	
Windows Server 2016	Debian 7/8/9
	RedHat 5/6/7
	SUSE 11.4/12.1/12.2
	OpenSUSE 13.1
	Gentoo 13.0

Cloud host requirements

Before using the Cloud Migration tool, consider the following requirements:

- The system time of the cloud host (AWS EC2 instance) is synchronized with the real time. Otherwise, an error indicating abnormal TimeStamp is recorded in the migration log file.
- The cloud host can access the Internet to transfer the data to Alibaba Cloud ECS. The Cloud Migration tool accesses the Alibaba Cloud services from the following endpoints:
 - Access ECS and VPC via HTTP 80 port: `http://ecs-cn-hangzhou.aliyuncs.com` and `http://vpc.aliyuncs.com`
 - Access STS service through HTTPS 443 port: `https://sts.aliyuncs.com`
 - Access public network IP addresses for intermediate instances via 8080 and 8703 proxy ports.

- Cloud Migration tool does not support migration of incremental data. You may select an off-peak period to suspend your on-premises server in which services that require data integration run.
- During migration, an ECS instance named `INSTANCE_FOR_GOTOALIYUN` is created by default under your Alibaba Cloud account. It acts as an intermediate station. To avoid migration failure, do not stop, restart, or release the intermediate ECS instance. The intermediate ECS instance is automatically released once the migration is complete.
- If the AccessKey that you create belongs to a RAM user, you must make sure that the specified RAM user is granted with `AliyunECSFullAccess` and `AliyunVPCFullAccess` role to operate the Alibaba Cloud resources. For more information, see the RAM document [Policy overview](#).

Linux system requirements

In addition, if you are using a Linux operating system, consider the following requirements:

- The Rsync library must be pre-installed.
 - CentOS: Run `yum install rsync -y`.
 - Ubuntu: Run `apt-get install rsync -y`.
 - Debian: Run `apt-get install rsync -y`.
 - Other releases: See the installation documents of the releases on their official website .
- SELinux must be deactivated. You can temporarily deactivate SELinux by running `setenforce 0`. However, we recommend that you disable the SELinux for better experience by specifying the `SELINUX=disabled` in the `/etc/selinux/config` file.
- The Kernel-based Virtual Machine (KVM) driver is installed. For more information about how to install a KVM driver, see [Install virtio driver](#).
- For servers such as CentOS 5, Red Hat 5, or Debian that has a too old kernel, and the version of GRUB (GRand Unified Bootloader) is earlier than 1.9. You may [update the boot loader GRUB to a version later](#).

5.2.3 b. Create a custom image from AWS EC2 instance

Procedure

1. [Download the Cloud Migration tool package](#). The decompressed files are as follows.

Table 5-1: Windows server

File or file folder	Description
Excludes folder	Filters out the directories from the migration. An rsync_excludes_win.txt file is included by default.
client_data	Maintains the record of transmission data during a migration. Transmission data includes the attributes of the intermediate instance for cloud migration, the process information of data disk migration, the generated custom image name, the region you plan to migrate to and so on.
user_config.json	The configuration file of your source server
go2aliyun_gui.exe	A GUI wizard for Windows OS. For more information, see Windows GUI of Cloud Migration tool .

Table 5-2: Linux server

File or file folder	Description
Check	An image compliance detection tool. It contains a client_check program by default.
client_data	Maintains the record of transmission data during a migration. Transmission data includes the attributes of the intermediate instance for cloud migration, the process information of data disk migration, the generated custom image name, the region you plan to migrate to and so on.
user_config.json	The configuration file of the source server.
Excludes folder	Filters out the directories from the migration. An rsync_excludes_win.txt file is included by default.
go2aliyun_client	The main program of Cloud Migration tool.

2. Decompress the Cloud Migration tool package to the specified directory.

3. Edit the user_config.json file, reference [Migrate to Alibaba Cloud by using Cloud Migration tool](#).

The user_config.json configuration file is edited in JSON. It contains necessary configuration information when you migrate the target on-premises server, including your AccessKey and target custom image name. You are required to manually configure a few parameters.

If you are using the Windows GUI version, you can complete the user_config on the GUI interface. For more information, see [Windows GUI of Cloud Migration tool](#).

4. Run Cloud Migration tool as an administrator or a root user to create a custom image.
Specifically, a Linux system can use the following commands to run the Cloud Migration tool:

```
chmod +x go2aliyun_client  
./go2aliyun_client
```

5.2.4 c. ECS configuration selection

This topic explains the configuration options available for ECS instances. After you choose a suitable instance type, you can create ECS instances and connect to them.

Configuration choices

These steps apply only to console operations. API users can refer to [API overview](#).

Alibaba Cloud offers more than 200 instance types in 10 categories to meet your needs in different application scenarios.

The following table is for reference when you start using ECS.

Type	Instance Type	Cloud disk	Internet bandwidth	Scenarios
Entry level	1 vCPU + 1 GiB memory (ecs.xn4.small)	40 GiB Ultra Cloud Disks	1 Mbps	Suitable for personal websites that are in their early stages and have a small number of visits
Advanced	1 vCPU + 2 GiB memory (ecs.n4.small)	40 GiB Ultra Cloud Disks	2 Mbps	Suitable for websites with moderate traffic, simple development environments, and code base

Type	Instance Type	Cloud disk	Internet bandwidth	Scenarios
General	2 vCPU + 4 GiB memory (ecs.n4.large)	40 GiB Ultra Cloud Disks	2 Mbps	Meets the needs of 90 % of entry-level users , and is applicable to enterprise operations, parallel computing and common data processing.
Ideal	4 vCPU + 16 GiB memory (ecs.sn2ne.xlarge)	40 GiB Ultra Cloud Disks	5 Mbps	Suitable for large and medium -sized websites, distributed analytic and computing, and Web applications.

For more information about xn4 type family, n4 type family, sn2ne type family, and other instance types, see [Instance type families](#).

Alibaba Cloud provides a flexible and editable way to modify your configuration. For subscription users, if the configuration is found to be excessively high or low in practice, you can [upgrade or downgrade instance configurations](#).

What to do next

After choosing an appropriate configuration scheme, you can create ECS instances.

5.2.5 d. Create ECS instances

This topic describes how to create an instance by using the console.

Procedure

1. Log on to the [ECS console](#).
2. In the left-side navigation pane, click **Instances**.
3. Click **Create Instance**.
4. Complete the **Basic Configurations** as follows:
 - a) Select a **Billing Method: Subscription** or **Pay-As-You-Go**.
 - b) Select a region and zone. By default, a zone is assigned randomly. You can also select an applicable one. For more information about regions and zones, see [regions and zones](#).



Note:

- After an instance is created, you cannot change its region and zone.

- Some instance type families are not supported in all regions. For more information, see [Create a compute optimized instance with GPU](#), [Create an f1 instance](#), [Create an SCC server instance](#), and [Create an EBM instance](#).

c) Select an instance type and specify the quantity of instances. The availability of an instance type family is determined by the selected region. For the application scenarios of each instance type, see [instance type families](#).

**Note:**

- The quota of Pay-As-You-Go or preemptible instances for your account is shown on the page.
- To use Elastic Network Interfaces (ENIs), select an enterprise-level instance type with no less than two vCPU cores or an entry-level instance type with no less than four vCPU cores. For more information about the maximum number of ENIs that can be attached to one instance, see [instance type families](#).
- To use an SSD Cloud Disk, select an I/O-optimized instance.

d) Select an image. Select the custom image you created.

**Note:**

- To use an SSH key pair, select a Linux image.
- To use user-defined data, select an image as instructed in [user data](#).

e) Select storage devices:

- **System Disk:** Required. A system disk is required for the image. Specify the cloud disk category and size for the system disk:
 - Cloud disk category: The available categories are determined by the selected region.
 - Size: If the selected image file is less than 40 GiB in size, the default disk size is 40 GiB. If the selected image file is greater than 40 GiB in size, the default size is

the image file size. The available disk size range varies according to the OS of the selected image, as shown in the following table.

Image type	Available size range
Linux (excluding CoreOS)) FreeBSD	Minimum value: 20 GiB or the image size (whichever is largest) Maximum value: 500 GiB
CoreOS	Minimum value: 30 GiB or the image size (whichever is largest) Maximum value: 500 GiB
Windows	Minimum value: 40 GiB or the image size (whichever is largest) Maximum value: 500 GiB

- **Data Disk:** Optional. If you create a cloud disk as a data disk at this time, you must select the disk type, capacity, and quantity, and set whether to [encrypt](#). You can create an empty data disk or create a data disk from a snapshot. Up to 16 data disks can be added.

**Note:**

The data disks added here have the following features:

- The billing method is the same as that of the instance.
 - A Subscription data disk has to be released along with the instance, but a Pay-As-You-Go data disk can be set to being released along with the instance.
- If you have selected an instance type family that has local disks (such as i1, d1, or d1ne), the local disk information is displayed. You cannot specify the quantity or category of local disks, which is determined by the selected instance type. For information about the local disks corresponding to various instance types with local disk, see [instance type families](#).

5. Click **Next: Networking to finish the network and security group configuration:****a) Select a network:**

- **VPC:** Must select a VPC and a VSwitch. If you do not have a VPC and a VSwitch, you can use the default ones.
- **Classic network:** If you purchased the ECS instance for the first time after June 16, 2016, 12:00 (UTC + 8), you can no longer select a classic network.

b) Configure the **Network Billing Method:**

- To assign a public IP address to the instance, select **Assign public IP**. Then, select **PayByTraffic** as the network billing method and specify the bandwidth. For public IP addresses assigned in this way, you cannot unbind them from the instance. For more information about network billing, see [billing of network bandwidth](#).
- If your instances do not need to access the Internet or your VPC instances [use an Elastic IP \(EIP\) address to access the Internet](#), you do not need to assign a public IP. You can unbind an EIP address from an instance.

c) Select a security group. You can use the default security group if you do not create one. For the rules of the default security group, see [default security group rules](#).**d) Add an Elastic Network Interface (ENI).** If your selected instance type supports ENI, you can add one and specify a VSwitch for it.**Note:**

By default, the ENI is released along with the instance. You can detach it from the instance in the [ECS console](#) or by using the [DetachNetworkInterface](#) interface.

6. (Optional.) Click **Next: System Configurations to finish the following configuration:**

- Select and set logon credentials. You can choose to [set the credentials after creating an instance](#) or do it now. Select a credential based on the image:
 - Linux: You can select a password or SSH key pair as a logon credential.
 - Windows: You can only select a password as a logon credential.
- Specify the instance name, which is displayed in the ECS console, and the host name, which is displayed inside the guest operating system.
- Set the advanced options:
 - Instance RAM role: Assign a RAM role to the instance.
 - UserData: Customize the startup behaviors of an instance or pass data into an instance.

7. (Optional) Click **Next: Grouping** to manage instances by group. You can add tags to instances to simplify future management.
8. Confirm the order:
 - In the **Configurations Selected** area, confirm all the configurations. You can click the edit icon to re-edit the configuration.
 - (Optional) Click **Save as launch template** to record your configuration as a launch template for further reference and a quick launch. For more information, see [instance launch template](#).
 - (Optional) Click **View Open API** to acquire the best API practice about how to create instances. At the left side, **API Workflow** explains the related API and request parameter values for the current operation. At the right side, the programming language-specific sample are given for you to use, currently, **Java** and **Python** samples are provided. For more information about ECS API, see ECS API Reference [Overview](#).
 - (Optional) If the billing method is **Pay-As-You-Go**, you can set **Automatic Release**.
 - (Optional) If the billing method is **Subscription**, you can set the duration and select whether to enable **Auto Renewal**.
 - Confirm the configuration costs. The billing methods for an instance and Internet bandwidth determine the displayed cost information, as shown in the following table.

Instance billing method	Fees estimated
Pay-As-You-Go or preemptible instance	Internet traffic fee + configuration fee. Configuration fees include: the instance type (vCPU and memory), the system disk, data disks (if any), and local disks (if any).
Subscription	Internet traffic fee + configuration fee. Configuration fees include: the instance type (vCPU and memory), the system disk, data disks (if any), and local disks (if any).

- Read and confirm **Terms of Service**.

9. Click **Create Instance**.

Result

After the instance is activated, click **Console** to view the instance details in the ECS console. In the **Instances** list of the relevant region, you can view the information of the new instance, such as the instance name, public IP address, internal IP address, and private IP address.

5.2.6 e. Connect to the instances

This topic describes how to connect to the instances you created in the previous step.

Procedure

1. Log on to the [ECS Console](#).
2. In the left-side navigation pane, click **Instances**.
3. Select a region.
4. In the instances list, find the ecs-01 instance that has been created. In the **Actions** column, click **Connect**.
5. In the pop-up **VNC Password** dialog box, copy the password, then click **Close**.



Note:

The VNC password appears only once. Remember the password so that you can use it to connect to the Management Terminal later.

6. In the pop-up **Enter VNC Password** dialog box, paste the password, and then click **OK**.
7. Log on to the ECS instance. Do the following according to the operating system:
 - For a Linux instance, enter the username **root** and the instance logon password that is set when you [create an instance](#).
 - For a Windows instance, in the upper left corner of the **Management Terminal** interface, click **Send Remote Call** > **CTRL+ALT+DELETE** to enter the logon interface. Enter the password set when you [create an instance](#) to log on.
8. (Optional) If you forget your instance logon password, [reset the instance password](#).

What's next

1. Start the ECS instance.
2. After you start the instance, make sure all the related processes are running, such as httpd. For Linux, you can check the status of the httpd process by using the command `netstat -lnp | grep httpd`.

5.3 2. Migrate database

5.3.1 Migrate database overview

The following topics explain how to migrate a WordPress database from AWS MySQL to Alibaba Cloud RDS by using Alibaba Cloud Data Transmission Service (DTS).

DTS is a data exchange service that streamlines data migration, data synchronization, and data subscription. It is applicable for databases running on Alibaba Cloud. For more information about DTS, refer to [What is DTS](#).

To migrate your database to Alibaba Cloud, follow these steps:

1. [Create migration task](#)
2. [Modify the configurations of the WordPress database](#)

5.3.2 a. Create migration task

Procedure

1. Log on to the [Alibaba Cloud DTS console](#).
2. Click **Data migration** in the left-side navigation pane.
3. Click **Create migration task**.
4. Configure the **Source endpoint and target endpoint**.
 - a. (Optional) Set the task **name**. DTS automatically generates a name for the migration task. You can edit the name according to your business requirements.
 - b. Enter the details of the source database in AWS MySQL, then click **Test the connection** to verify the parameters are correct. For parameter descriptions, refer to the following table.

Parameter	Description
Instance type	Select On-premises databases .
Instance region	Select the region in closest geographic proximity to the source instance.
Database engine	Select MySQL .
Host name or IP address	Enter the MySQL database connection string.
Port	Select the MySQL database listener port.
Database account	Enter the MySQL database account name.
Database password	Enter the MySQL database account password.

- c. Enter the details of the target database in Alibaba Cloud RDS, then click **Test the connection** to verify the parameters are correct. For parameter descriptions, refer to the following table.

Parameter	Description
Instance type	Select RDS Instance .

Parameter	Description
Instance region	Select the region of the RDS instance.
RDS instance ID	Select the target RDS instance ID.
Database account	Enter the access account name of the RDS instance database.

Parameter	Description
Database password	Enter the access account password of the RDS instance database.

1.Source endpoint an

* Task Name: aws-20

Source Database

* Instance Type: On-p

* Instance Region: Sing

* Database Engine: MyS

* Host Name or IP Address: v

* Port: 3306

* Database account: root

* Database Password:

5. Click **Authorize Whitelist and Enter into Next Step**.
6. Configure the **migration type and migration objects**.
 - a. i. Select all the **migration types**, including **Schema migration**, **Existing data migration**, and **Incremental replication**.
 - b. Select all the **migration objects**, including **database**, **table**, and **column**.
7. Perform the **Pre-check**.

**Note:**

If the pre-check fails, click **Failed** to check the details of the failed items, and click **View** to check the reason and solution. Troubleshoot the issues and perform pre-check again until you are successful.

8. Start the migration task. After you start the task, you can view the migration status and progress in the task list.

5.3.3 b. Modify the configurations of the WordPress database

Procedure

1. Find the path of the file where WordPress is installed, for example, `cd/opt/bitnami/apps/wordpress/htdocs/`.
2. Configure the WordPress database as follows.

```
vim wp-config.php/bitnami
// ** MySQL settings - You can get this info from your web host ** //
/** The name of the database for WordPress */
define('DB_NAME', 'bitnami_wordpress');

/** MySQL database username */
define('DB_USER', 'bn_wordpress');

/** MySQL database password */
define('DB_PASSWORD', '45bee7e8ac');

/** MySQL hostname */
define('DB_HOST', 'localhost:3306');
```

5.4 3. Migrate storage

5.4.1 Migrate storage overview

The following topics explain how to migrate AWS S3 to Alibaba Cloud OSS by using the `ossimport` tool, and then mount an OSS bucket to WordPress by using the `ossfs` tool.

The ossimport tool allows you to migrate data stored locally or in other cloud storage systems to the OSS. For more information about the ossimport tool, see [Architecture and configuration](#).

The ossfs tool allows you to mount Alibaba Cloud OSS buckets to local files in Linux systems. For more information about ossfs, see the [installation instructions](#).

To migrate your storage to Alibaba Cloud, follow these steps:

1. [Download and configure ossimport tool](#)
2. [Migrate data using ossimport tool](#)
3. [Mount OSS bucket to WordPress](#)

5.4.2 a. Download and configure ossimport tool

Prerequisites

- Install Java 1.7 or later.
- Make sure you are using Linux OS.

Context

We recommend using the ossimport tool in standalone mode to migrate storage from AWS S3 to Alibaba Cloud OSS. Standalone mode works well for data migration when the data size is smaller than 30 TB. If your data size is larger than 30 TB, then we recommend using ossimport in distributed mode instead. The following procedure assumes you are using the ossimport tool in standalone mode. For details about using ossimport in distributed mode, see [Distributed deployment](#).



Note:

Standalone mode is supported on both Linux and Windows.

Procedure

1. Download the tool for standalone deployment: [ossimport-2.3.3.zip](#). Download the tool to a local directory.
2. Use the tool or the `unzip` command to unzip the files. The file structure after unzipping is as follows:

```
ossimport
├── bin
│   └── ossimport2.jar # The JAR including master, worker, tracker, and console
├── modules
│   └── conf
│       └── local_job.cfg # The job configuration file
```

```
|   └── sys.properties # Configuration file of the system running parameters
|   └── console.bat    # Windows command line, which can run distributed call-in
tasks
|   └── console.sh     # Linux command line, which can run distributed call-in tasks
|   └── import.bat     # The configuration file for one-click import and execution in
Windows is the data migration job configured in conf/local_job.cfg, including start,
migration, validation, and retry
|   └── import.sh      # The configuration file for one-click import and execution
in Linux is the data migration job configured in conf/local_job.cfg, including start,
migration, validation, and retry
|   └── logs           # Log directory
|   └── README.md      # Description documentation. We recommend that you
carefully read the documentation before using the feature
```

3. Configure the files.

The standalone version has two configuration files: `conf/sys.properties` and `conf/local_job.cfg`.

- **Do not** change the configuration items in `conf/sys.properties`: `workingDir`, `workerUserName`, `workerPassword`, and `privateKeyFile`.
- **Do not** change the `conf/local_job.cfg` name and location.
- **Do not** change the `jobName` configuration item.

Configure other items appropriately.

Note Confirm the parameters in

`sys.properties`

and

`local_job.cfg`

before submitting the job. The parameters in the job cannot be changed after the job is submitted.

5.4.3 b. Migrate data using ossimport tool

Context

In standalone mode, the data migration job can be executed with one-click import:

Procedure

1. Run one-click import. Run `import.bat` in `cmd.exe` for Windows, and run `bash import.sh` for Linux.
2. If you previously run this job, you are asked if you want to continue the job from the last breakpoint or if you want to run a new synchronization job. If you initiate a new data

migration job, or have modified the synchronized source end/destination end, run the synchronization job again.



Note:

After a job starts in Windows, a new cmd window appears showing the synchronization job in progress and the log. The job status in the old window is refreshed every 10 seconds. Do not close these two windows during the data migration process. In Linux, the preceding process is run in the background.

3. When the job is complete, if a task failed, you are asked if you want to retry. Enter y to retry or n to skip this step and exit. To see why the upload failed, open the file `master/jobs/local_test/failed_tasks/<taskid>/audit.log` and check the cause.

After a job is submitted, the master splits the job into tasks, the workers run the tasks and the tracker collects the task statuses. After a job is completed, the `ossimport` directory contains the following:

```
ossimport
├── bin
│   └── ossimport2.jar # The standalone version JAR
├── conf
│   ├── local_job.cfg # The job configuration file
│   └── sys.properties # Configuration file of the system running parameters
├── console.sh # The command line tool
├── import.sh # One-click import script
├── logs
│   ├── import.log # Archive logs
│   ├── job_stat.log # Job status record
│   ├── ossimport2.log # Running log of the standalone version
│   └── submit.log # Job submission record
├── master
│   ├── jobqueue # Store jobs that have not been fully split
│   ├── jobs # Store the job running status
│   └── local_test # Job name
│       ├── checkpoints # The checkpoint record of the master splitting the job to
│       └── tasks
│           ├── 0
│           ├── 034DC9DD2860B0CFE884242BC6FF92E7.cpt
│           └── dispatched # Tasks that have been assigned to the workers but
│               haven't been fully run
│                   ├── localhost
│                   ├── failed_tasks # Tasks that failed to run
│                   ├── pending_tasks # Tasks that have not been assigned
│                   ├── succeed_tasks # Tasks that run successfully
│                   └── A41506C07BF1DF2A3EDB4CE31756B93F_1499744514501@localhost
│                       └── audit.log # The task running log. You can view the error causes in
│                           the log
├── the log
│   ├── DONE # Mark of successful tasks
│   ├── error.list # The task error list. You can view the error file list
│   └── STATUS # The task status marker file. The content is Failed or
├── Completed
│   └── TASK # The task description information
└── worker # Status of the task being run by the worker. After running, tasks are
    managed by the master
```

```
└─ jobs
   └─ local_test
      └─ tasks
```

**Note:**

- For job running information, view **log/ossimport2.log**.
- For the task failure cause, view **master/jobs/\${JobName}/failed_tasks/\${TaskName}/audit.log**.
- For failed task files, view **master/jobs/\${JobName}/failed_tasks/\${TaskName}/error.list**.

5.4.4 c. Mount OSS bucket to WordPress

The ossfs tool allows you to mount OSS buckets as though they are local directories. In this way, WordPress configuration and content that are stored in OSS can be accessed by ECS instances as though they are local files.

Prerequisites

Follow these steps if ossfs is not installed:

**Note:**

ossfs is only supported on Linux OS. If you are using Windows, you can install VM VirtualBox and run Linux on a virtual machine, then continue with the migration process.

1. Download the ossfs according to the following table if you are using the listed released Linux OS. For more information, see [Quick installation](#).

Released Linux	Download address
Ubuntu 16.04 (x64)	ossfs_1.80.5_ubuntu16.04_amd64.deb
Ubuntu 14.04 (x64)	ossfs_1.80.5_ubuntu14.04_amd64.deb
CentOS 7.0 (x64)	ossfs_1.80.5_centos7.0_x86_64.rpm
CentOS 6.5 (x64)	ossfs_1.80.5_centos6.5_x86_64.rpm

**Note:**

Older Linux distributions using older kernels do not work well with ossfs, and this can cause frequent disconnections. We recommend using a recent Linux distribution such as Ubuntu 16.04 or CentOS 7.0 or greater.

2. Install ossfs with one of the following commands:

- Run the following commands to install ossfs on Ubuntu:

```
sudo apt-get update
sudo apt-get install gdebi-core
sudo gdebi your_ossfs_package
```

- Run the following command to install ossfs on CentOS 6.5 or later:

```
sudo yum localinstall your_ossfs_package
```

- Run the following command to install ossfs on CentOS 5 or later:

```
sudo yum localinstall your_ossfs_package --nogpgcheck
```

Procedure

1. Create an OSS bucket and use the ossfs tool to mount the my-bucket bucket to the WordPress directory.
2. Fill in the AccessKeyId, AccessKeySecret and the OSS endpoint of Alibaba Cloud.

```
echo my-bucket:faint:123 > /etc/passwd-ossfs
chmod 640 /etc/passwd-ossfs
mkdir /tmp/ossfs
ossfs my-bucket /tmp/ossfs -ourl=http://oss-cn-hangzhou.aliyuncs.com
```

3. Verify that the file can be read and written automatically from the OSS side.

6 Step 4: Check results

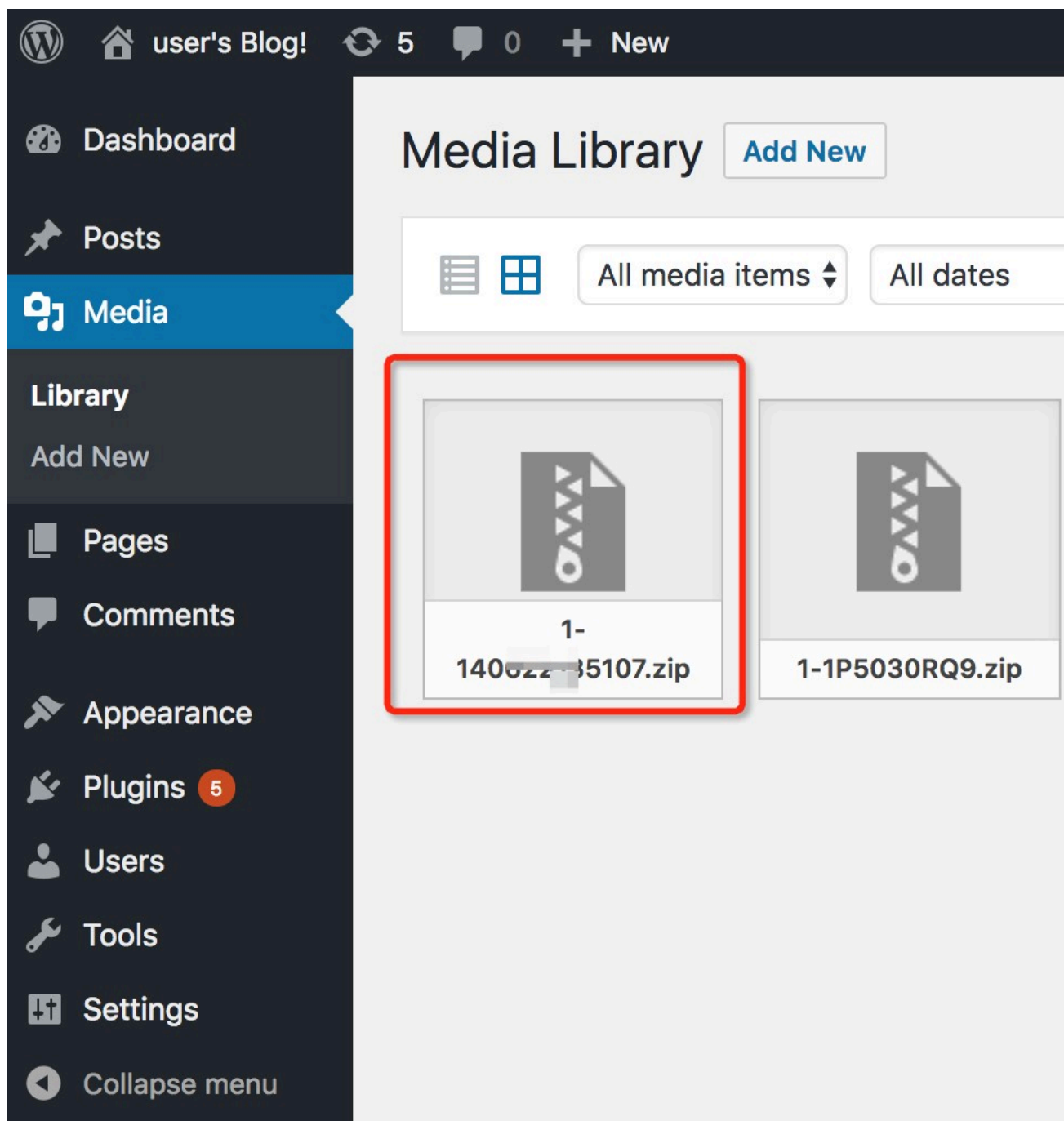
Procedure

1. Make sure your WordPress site is up and running by visiting the public IP address of the instance where you installed and configured ossfs.



2. Log on to your WordPress site and try making a new post. Make sure you can successfully post new text, photos, and videos before continuing. If are not able to, you may need to re-check your wp-config settings and ossfs settings.
3. Make sure that you can view content that you added before your migration.

4. Add a new file and check OSS.
 - a. Upload a *.zip file to WordPress.



- b. Log on to the [OSS console](#) and go the OSS bucket to check that the file is there.

7 Step 5: Create a final custom image

The custom image created in this topic will be used to create new instances in an auto scaling group.

Procedure

1. Log on to the [ECS console](#).
2. Shut down the ECS instances you created in Step 3.
3. [Create a custom image by using an instance](#).
4. Restart the ECS instances.

8 Step 6: Configure Auto Scaling

8.1 a. Activate and authorize Auto Scaling service

Context

Before using Auto Scaling, you must activate the service. To create clusters or on-demand execution plans, you must grant the [AliyunESSDefaultRole](#) role to Auto Scaling, so that it can call ECS, VPC, SLB, and other relevant services. For more information about roles and permissions, see [what is RAM](#).

Procedure

1. Log on to the [Auto Scaling console](#).
2. Click **Authorize** to go to the RAM console and grant authorization.
3. Select **AliyunESSDefaultRole** and click **Agree to Authorize**.
4. Return to the Auto Scaling console and refresh the page.

By default, the role [AliyunESSDefaultRole](#) allows Auto Scaling to call the following Alibaba Cloud resources for you. The complete policy list for AliyunESSDefaultRole is as follows.

Table 8-1: ECS permissions

Permission name	Permission description
ecs:RunInstances	Create one or more ECS instances as needed.
ecs:CreateInstance	Create ECS instances.
ecs:StartInstance	Start ECS instances.
ecs:AllocatePublicIpAddress	Allocate public IP addresses to ECS instances.
ecs:StopInstance	Stop ECS instances.
ecs:DeleteInstance	Delete ECS instances.
ecs:DescribeInstances	Query ECS instance lists.
ecs:DescribeInstanceAttribute	Query ECS instance attributes.
ecs:ModifyInstanceAttribute	Modify ECS instance attributes.
ecs:DescribeSecurityGroupAttribute	Query security group attributes.

Permission name	Permission description
ecs:DescribeSnapshots	Query snapshot lists.
ecs:DescribeKeyPairs	Query key pair lists.

Table 8-2: SLB permissions

Permission name	Permission description
slb:DescribeLoadBalancerAttribute	Query SLB instance information.
slb:RemoveBackendServers	Delete backend servers from a SLB instance.
slb:DescribeHealthStatus	Check the health of the backend servers of a SLB instance.
slb:AddBackendServers	Add backend servers to a SLB instance.
slb:SetBackendServers	Configure backend server weights.

Table 8-3: RDS permissions

Permission name	Permission description
rds:ModifySecurityIps	Modify the IP address whitelist of an RDS instance.
rds:DescribeDBInstanceAttribute	View RDS instance details.
rds:DescribeTaskInfo	Query RDS task information.
rds:DescribeDBInstanceIPArrayList	View the IP address whitelist of an RDS instance.

Table 8-4: VPC permissions

Permission name	Permission description
vpc:DescribeVpcs	Query VPC lists.
vpc:DescribeVSwitches	Query VSwitch lists.

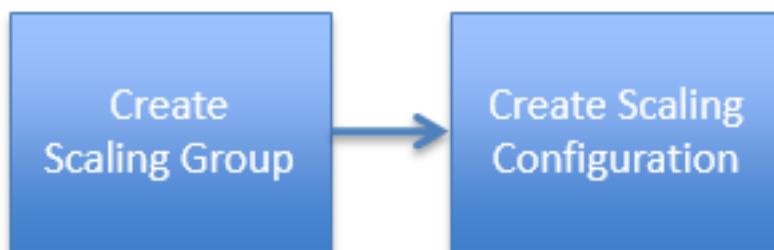
What's next

After completing authorization, you can use the Auto Scaling service. Next, you can create your first scaling group in the desired region (such as **Hong Kong**). For more information, see [create a scaling group](#).

8.2 b. Create a scaling group and configuration

Complete the steps in this topic to create a simple scaling solution.

Procedure



1. Log on to the [Auto Scaling console](#), then choose **Overall solution creation and management** from the navigation pane.
2. Create a scaling group. A scaling group is made up of ECS instances that can be used in the same scenario. You can define the minimum and maximum number of ECS instances in the group, and the associated Server Load Balancer instances and RDS instances.

- a. Configure the parameters listed.

**Note:**

For **Minimum Number of Instances Allowed for Scaling**, Auto Scaling will create this number of ECS instances in the scaling group when you have created the scaling group. For **Server Load Balancer**, all the ports that the specified SLB is listening to must have health checks enabled.

- b. Click **Submit**.
 - c. Click **Create scaling configuration**.
3. Create a scaling configuration. You can configure the specifications of the ECS instances used for scaling.
 - a. Enter a value or make a selection for each option listed. For **Image Type**, select **Custom Image**.
 - b. Click **Preview**. The **Preview** page shows the configurations you selected and the cost of the solution.

**Note:**

You are only charged for running ECS instances. Auto Scaling service is free.

4. Click **Complete**. Check whether the scaling group you specified is created.

**Note:**

Auto Scaling starts by creating the minimum number of instances you specify, and then adds these instances to the SLB service. The IP addresses of these instances are added to the RDS whitelist.

8.3 c. Check SLB instances and the scaling group

Context

Query the ECS instance list of a scaling group

There are two types of ECS instances: automatically created and manually added.

- Automatically created ECS instances are created by the Auto Scaling service based on scaling configuration and rules.
- Manually added ECS instances are manually added to a scaling group, not created by the Auto Scaling service.

Lifecycle of ECS instances in a scaling group

An ECS instance in a scaling group may be in the following states during its lifecycle:

- Pending: The ECS instance is being added to the scaling group. The instance may be being created, added to the Server Load Balancer instance, or added to the RDS access whitelist.
- In Service: The ECS instance has been added to the scaling group and is providing services.
- Removing: The ECS instance is being removed from the scaling group.

ECS instance health status

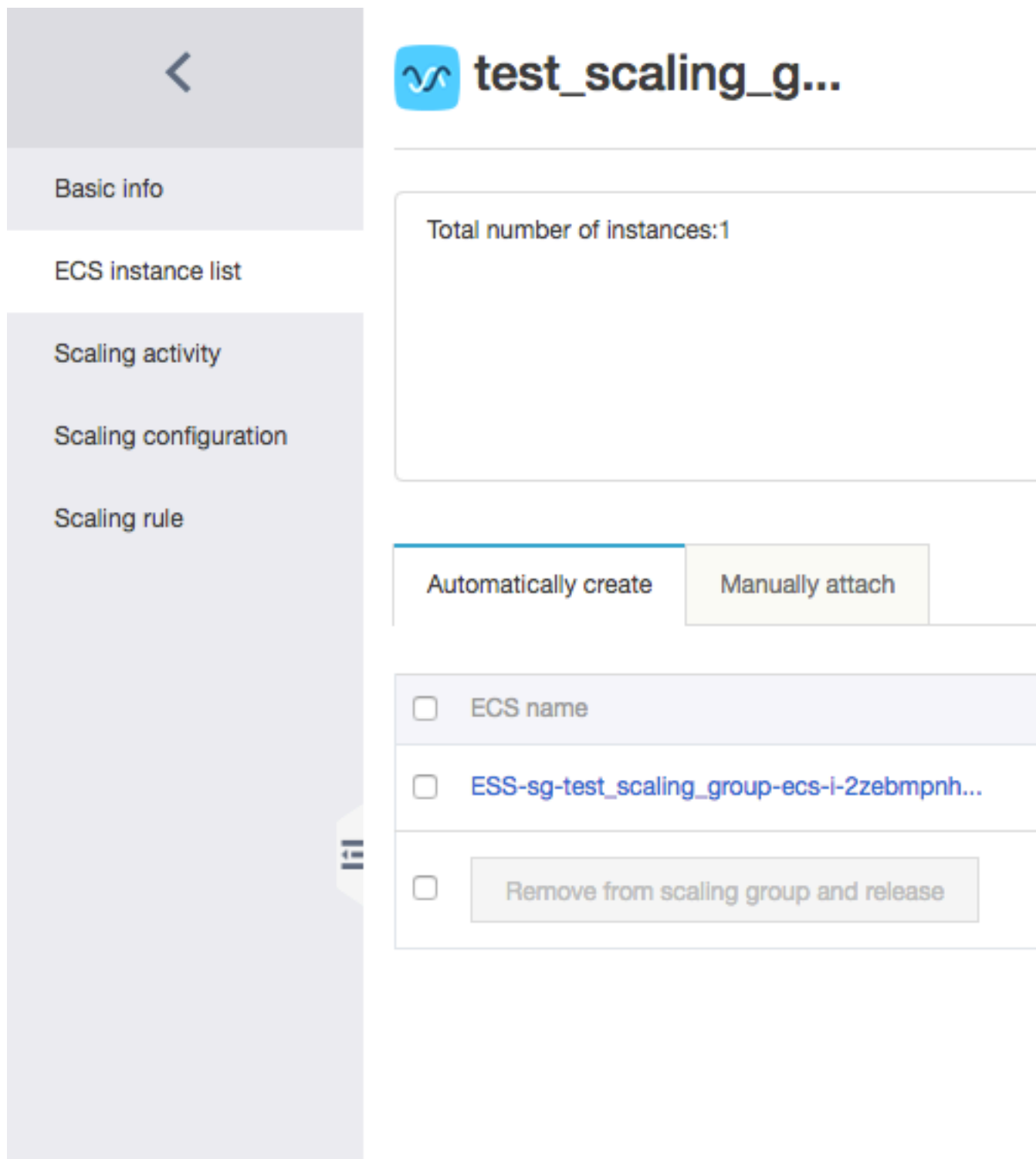
An ECS instance in a scaling group may be in the following health states:

- Healthy
- Unhealthy

ECS instances are unhealthy when they are not running. Auto Scaling automatically removes unhealthy ECS instances from scaling groups. Auto Scaling stops and releases unhealthy ECS instances that were created automatically. Auto Scaling does not stop and release unhealthy ECS instances that were created manually.

Procedure

1. Log on to the [Auto Scaling console](#).
2. On the **Scaling group management** page, click **Manage** next to the scaling group.
3. Click **ECS instance list** on the left side.



9 Step 7: Configure DNS

Modify your DNS configuration to allow customers to access to your WordPress site by using your domain name. If your domain name is registered with Alibaba Cloud, follow the steps in this topic. If your domain name is registered with a third party, go to where you registered your domain and create a new DNS record that points to your Alibaba Cloud deployment.

Procedure

1. Log on to the [Alibaba Cloud DNS console](#).
2. Click **Add Domain Name**.
3. Enter your domain name in the dialog box and click **Confirm**.
4. [Add a record](#) to the domain name to enable the service:
 - a. Log on to the [Alibaba Cloud DNS console](#).
 - b. On the **Basic DNS** or **Advanced DNS** page, click **Configure** under the domain name for which you want to modify the DNS settings.
 - c. Click **Add Record**.
 - d. Enter record information as follows.
 - A. Select a type:

Types	Description
A (Address)	An A record points your domain to the IP address of the host (for example, 10.10.10.10).
CNAME (Alias)	A CNAME record redirects a subdomain to a different domain name (for example, www.yourdomain.com redirects to www.anotherdomain.com) that is then queried to resolve the original DNS query.
MX (Mail)	An MX resource record points your domain to the mail exchange server.
TXT (Text)	A TXT record specifies an arbitrary non-formatted text string of up to 255 maximum length. It is typically used to add a Sender Policy Framework (SPF) record for anti-spam purposes.
NS (Name Server)	An NS record specifies another authoritative name server for resolving subdomains.

Types	Description
AAAA (IPv6)	An AAAA record is similar to an A record but points your domain to an IPv6 IP address (for example, ff06:0:0:0:0:0:c3) rather than an IPv4 address.
SRV (Service)	An SRV record specifies a server that provides special services (for example, _example-server._tcp).

B. Select a host, which refers to the prefix before the domain names.

Types	Description
www	Use www to match www.yourdomain.tld.
@	Use @ to exactly match the original domain name (for example, @yourdomain.tld).
*	Use * (asterisk) as a wildcard to match any prefix. For example, *.example.com matches <any prefix>.example.com.
mail	Use mail to match mail.yourdomain.com. It is typically used for mail server resolution.
Second-level domain name	For example, to match abc.yourdomain.com, enter abc.
Mobile website	For example, to match m.yourdomain.com, enter m.

C. Select an ISP line so that visitors can access your website through the specified ISP line.

D. Enter the value and TTL.

e. Click **Confirm**.

5. Finally, go to the domain name registrar to change its DNS service provider to Alibaba Cloud DNS. Alibaba Cloud DNS servers include ns7.alidns.com and ns8.alidns.com.

Result

The newly added record usually takes effect after a few seconds, and is enabled by default. Note that in some cases DNS propagation can take up to 24 hours.

What's next

Enter the domain name of your WordPress site into a Web browser. If you are redirected to the correct website, the migration is complete.

10 Step 8: Configure CDN

You can deploy CDN to deliver the content of your WordPress site to customers more efficiently. This topic describes how to enable CDN, add a CDN domain name, configure cname, and verify if CNAME is enabled for the domain name.

Procedure

1. Enable the CDN service.

- a. Go to the Alibaba Cloud website, and go to the [CDN Product Details page](#). Then click **Buy Now**.
- b. On the order page, select an appropriate [billing method](#). Once you confirm the order, the CDN service is enabled, and you can access the domain name you want to accelerate.

2. Add a CDN domain name

a. Add a domain name.

Go to the CDN console, select **Domain Names**. You can view all the CDN domain names that you have added. Click **Add Domain Name**.

- b. Enter the basic information. Enter the CDN domain name (typically a subdomain name or a wildcard domain name is used, for example `cdntest.example.com`), and select an appropriate business type and origin site. Click **Next** to wait for the reviewing.



Note:

Using Alibaba Cloud ECS or OSS as your origin site will accelerate your domain name verification.

CDN domain name Description:

- Wildcard domain acceleration is supported. Chinese domain acceleration is not supported. Note this rule when you enter wildcard domains: *.test.com. For more information, see Wildcard Domain Acceleration Rules.
- A CDN domain cannot be added multiple times. If you encounter a **Domain already added** issue, submit a ticket to us for help.
- Up to 20 CDN domains can be added under one account.
- The domain content must comply with CDN specifications. For more information, see [CDN Service Use Restrictions](#).

Business type description:

The Alibaba Cloud CDN scheduling system performs specific scheduling optimization based on the different types of business you select.

Business type	Description
Images and small files	If the content to be accelerated is mostly images and web files (For example, small files, images and web-styled file), we recommend that you select the "images and small files" business type.
Large file downloads	If the content to be accelerated is large files (static files larger than 20 MB), for example, games installation package, application update, mobile ROM update, application program package download and other scenarios, acceleration of large file downloads is recommended.
On-demand video/audio	For large video files, acceleration of live streaming media is recommended to accelerate video on demand and live streaming services.

Business type	Description
Live streaming media	The acceleration of live streaming media is provided. Currently, RTMP-based and HLS-based live streaming acceleration is supported. For live streaming business, user-defined origin servers are not supported, and a central live streaming server video-center.alivecdn.com.

Types of origin sites:

Origin site type	Description
IP	You can enter multiple internet server IPs. Alibaba Cloud ECS IP can be unaudited.
Origin server domain name	Supports multiple origin server domain names. Note The origin server address you entered cannot be the same as the CDN domain name. Otherwise, it leads to cycling resolution, and cannot be returned to the origin server. For example, if your CDN domain name is img.yourdomain.com, we recommend that you set your origin server as cdn.yourdomain.com.
OSS	Enter the internet domain name of Alibaba Cloud OSS bucket . For example, xxx.oss-cn-hangzhou.aliyuncs.com. You can view the internet domain name of OSS on OSS console. You can also directly select the OSS bucket under the same account .



Note:

SNI is not supported for CDN back-to-origin requests.

Acceleration region description:

- Select the acceleration region based on your needs: Mainland China, overseas only (domestic nodes unavailable), or world-wide.
- L3 and above members can apply for this feature by submitting a ticket.
- Traffic generated from overseas nodes incurs a higher cost than that from domestic nodes. For more information, see [Purchase Guide](#).
- If you select overseas acceleration only, the registration at China's Ministry of Industry and Information Technology is not required.

c. Complete adding domain name.

After the CDN domain name reviewing is completed, it displays in **Domain Names**, and the status **Running** indicates it has been added successfully.



Note:

After adding the CDN domain name, Alibaba Cloud CDN assigns you the corresponding cname address. You must configure cname for the CDN service to take effect (see the following step).

3. Configure cname.

- a. Copy the CNAME address assigned by the system from the domain name list in **Domain Names** in the CDN console.
- b. Go to the DNS console of your DNS service provider (for example, www.net.cn, Alibaba Cloud DNS, DNSPod, xinnnet, Tencent DNS, route53 and godaddy) to add the cname record.

4. Verify if CNAME is enabled for the domain name. After you configure the CNAME record, the CNAME record may take a variable period of time to take effect, depending on your DNS provider.

What's next

You can `ping` or `dig`. If the cname you added is resolved to `*.*kunlun*.com`, it indicates the CNAME configuration takes effect, and the CDN service is enabled.