

ApsaraDB for MongoDB

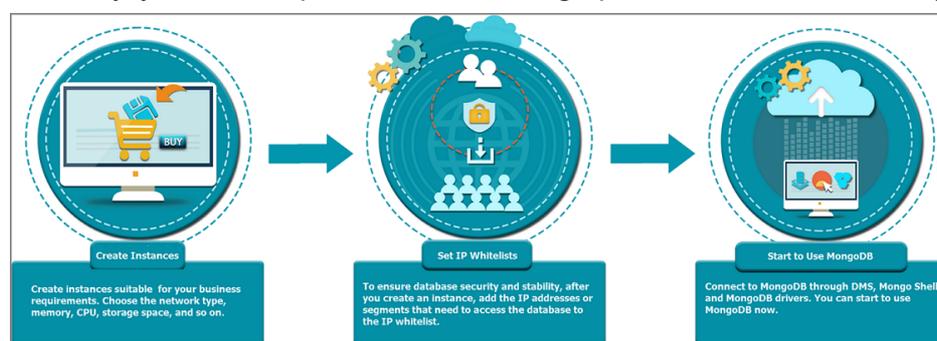
Quick Start for Replica Set

Quick Start for Replica Set

Quick start flowchart

If you use Alibaba Cloud ApsaraDB for MongoDB for the first time, read MongoDB usage instructions and Introduction to MongoDB Console first.

Generally, you need to perform the following operations from instance buying to instance use.



Purpose of the document

This document describes how to create a MongoDB instance, perform basic settings, and connect the instance database, helping users know the procedures from buying a MongoDB instance to using the instance.

Target reader

Users buying a MongoDB instance for the first time.

Users who need to perform basic settings for the instance they created.

Users who want to know how to connect a MongoDB instance.

Create an instance

ApsaraDB for MongoDB was officially launched for commercial operation on March 18, 2016. During

commercial operation, China North 1, China North 2, China East 1, China East 2, and China South 1 physical nodes are available for purchase. For the specific purchase and activation procedures, please refer to Purchasing.

Retrieve the seven connection elements

ApsaraDB for MongoDB initializes a three-node replica set. You can use the connection addresses of two data nodes out of the three that are made available to access the data nodes.

The seven elements used to connect to ApsaraDB for MongoDB instances are: instance username, password, replica set name, and the domain name addresses and port numbers for two nodes.

Log onto the ApsaraDB for MongoDB console to view all connection elements except for the password, as shown below:

The screenshot displays the console interface for an ApsaraDB for MongoDB instance. The left sidebar contains navigation options: 基本信息 (Basic Information), 备份与恢复 (Backup and Recovery), 监控信息 (Monitoring Information), 报警规则 (Alert Rules), and 安全控制 (Security Control). The main content area is divided into three sections:

- 基本信息 (Basic Information):** Includes fields for 实例ID (Instance ID: dds-bp11a60932332024), 名称 (Name: dds-bp11a6093233...), 地域 (Region: 华东 1 可用区 B), 网络类型 (Network Type: 经典网络), 规格 (Specification: 1核2G), 磁盘空间 (Disk Space: 20 G), 创建于 (Created At: 2016-09-20 15:12:00), and 到期时间 (Expiration Time: 按量付费实例需自行释放).
- 帐号管理 (Account Management):** Shows 帐号名 (Account Name: root (权限为admin数据库下的root权限)).
- 连接信息 (Connection Information):** Shows 版本 (Version: 3.2), 副本集名称 (Replica Set Name: mgset-1916099), 节点1 (Node 1: dds-bp11a60932332024.mongo.aliyuncs.com:3717), and 节点2 (Node 2: dds-bp11a60932332024.mongo.aliyuncs.com:3717). A note at the bottom indicates 外网连接 (External Network Connection) requirements.

Note: The login password is set when the instance is first created. If it was not set during creation, click **Reset Password** to set a new login password.

Import data

ApsaraDB for MongoDB currently provides two migration solutions, but does not support online data migration. During migration, writes to the source database must be suspended for a time.

Use DTS (data transmission service) for migration

Log onto the MongoDB Console, click the instance ID or **Manage** to go to the **Basic Information** page, and select **Self-built MongoDB Migration** to go to the **Create Migration Task** page.

Select MongoDB as the database type and enter the source database connection information.

The screenshot shows the 'Create Migration Task' wizard in the MongoDB console. It is currently on the '1. Source and Target Database' step. The 'Task Name' is 'dtsa3zvjh1q'. Under 'Source Information', the 'Instance Type' is 'Public IP Self-built Database'. The 'Database Type' is 'MongoDB'. The 'Host Name or IP Address' is '27017'. The 'Database Name', 'Account', and 'Password' fields are empty. A red box highlights the 'Database Type', 'Host Name or IP Address', 'Database Name', 'Account', and 'Password' fields.

Then, use the Data Transmission Service (DTS) Migration Wizard to perform migration operation.

For detailed instructions, refer to the DTS Manual.

Use the built-in command line tool for migration

MongoDB has built-in `mongodump` and `mongorestore` command lines that can import and export data.

Note: Please use the `mongodump` and `mongorestore` tools of MongoDB version 3.0 or above.

Back up self-built database data.

First, you need to connect to the self-built database and select an account with the relevant permissions. Then, execute `'mongodump'` to export the content of the self-built database. For example, execute the following statement to export the all databases and create a backup file named `"dump"`.

```
mongodump --host xxx:27017 --authenticationDatabase admin -u xxx -p xxx
```

For details, refer to [mongodump Command Official Documentation](#).

Import the backup file into ApsaraDB for MongoDB.

Execute the 'mongorestore' command based on the backup file created in the previous step to import all data into ApsaraDB for MongoDB. For example, execute the following statement to import the entire database.

```
mongorestore --host dds-xxx:3717 --authenticationDatabase admin -u root -p xxx dump
```

Data export

Export to a local MongoDB database

ApsaraDB for MongoDB supports routine backup task settings and temporary backup. You can regularly or occasionally implement backup tasks and then perform data export by downloading the backup file.

Go to the [Console](#) > [Backup Recovery](#) > [Backup List](#).

Select the target backup set and then click **Download**.

After manually downloading the backup file, create a local MongoDB environment.

Execute the 'mongorestore' command to conveniently complete data export. For example, execute the following command to import data:

```
cat xx.ar (file downloaded from the console) | mongorestore -h xxx --port xxx -u[root user] -p[root password] --drop --gzip --archive -vvv --stopOnError
```

Migrate to another ApsaraDB for MongoDB instance

By using the backup file to create a new instance, you can export the data to another ApsaraDB for MongoDB instances.

Go to the [Console](#) > [Backup Recovery](#) > [Backup List](#).

Select a single backup set and, click **Create Instance from Backup Point** to go to the purchase page before creating an instance.

Select Subscription or Pay-As-You-Go as the instance billing method.

Note: The new instance must be in the same physical region as the original instance and the memory specification and disk size should be as close as possible to the configuration of the original instance.