

ApsaraDB for MongoDB

Developer Guide

Developer Guide

API reference

API overview

Life-cycle

API	Description
CreateDBInstance	Creates replica set instances.
ModifyDBInstanceSpec	Changes configurations for replica set instances.
DeleteDBInstance	Releases an instance.
RenewDBInstance	Renews replica set instances.
CreateShardingDBInstance	Creates sharded cluster instances.
CreateNode	Adds cluster instance components.
DeleteNode	Deletes cluster instance components.
ModifyNodeSpec	Changes configuration for cluster instances.

Instance management

API	Description
DescribeRegions	Queries the list of available regions.
DescribeDBInstances	Queries the instance list.
RestartDBInstance	Restarts the instance.
ModifyDBInstanceMaintainTime	Modifies the instance maintenance time.
ModifyDBInstanceDescription	Modifies instance remarks.

DescribeDBInstanceAttribute	Queries instance details.
DescribeReplicaSetRole	Queries replica set roles and connection information.
DescribeShardingNetworkAddress	Queries sharded cluster connection information.
ModifyDBInstanceNetworkType	Switches the instance type.
ModifyDBInstanceNetExpireTime	Prolongs retention period of classic networks.

Account management

API	Description
DescribeAccounts	Queries the account.
ResetAccountPassword	Resets the password.

Database security management

API	Description
DescribeSecurityIps	Queries the instance access whitelist.
ModifySecurityIps	Modifies the instance access whitelist.
DescribeAuditRecords	Queries the audit log.
DescribeAuditFiles	Queries audit log files.

Backup recovery management

API	Description
DescribeBackupPolicy	Views the backup policy.
ModifyBackupPolicy	Modifies the backup policy.
CreateBackup	Creates backups.
DescribeBackups	Views the backup list.
RestoreDBInstance	Recovers the data.

Monitoring alarm management

API	Description
DescribeDBInstancePerformance	Queries the instance performance data.

Calling method

Service address

The service access address of ApsaraDB for MongoDB Open APIs is `mongodb.aliyuncs.com`.

Communication protocols

The system supports request communication through HTTP or HTTPS. We recommend that requests be sent over HTTPS for enhanced security.

Request methods

The system supports HTTP GET requests. In this mode, you must include the request parameters in the request URL.

Request parameters

For each request, the Action parameter must be specified, `CreateDBInstance` for example, and each action must contain the public request parameters and the specific request parameters.

Character encoding

Requests and return results are encoded using the UTF-8 character set.

How to use RAM authorization

How to use RAM authorization

ApsaraDB for MongoDB instances you create with your cloud account are resources of this account. By default, accounts have full operation permissions on their resources.

Alibaba Cloud Resource Access Management (RAM) allows you to assign the access and management permissions for ApsaraDB for MongoDB resources under your cloud account to RAM subaccounts.

If you do not need to use RAM, skip this section.

Resource type in RAM

Currently, one type of resource, DBInstance, can be authorized in RAM. When performing authorization through RAM, the resource description method is as follows:

Resource type	Resource description manner in an authorization policy
Instance	acs:dds:\$regionid:\$accountid:dbinstance/\$dbinstanceid acs:dds:\$regionid:\$accountid:dbinstance/ acs:dds:::dbinstance/

Specifically:

All \$regionids must be the ID of a certain region, or *.

All \$dbinstanceids must be the ID of a certain instance, or *.

Similarly, \$account-id is your cloud account numerical ID and can be replaced by *.

Authorization actions in RAM

In RAM, the following actions can be authorized to an ApsaraDB for MongoDB resource.

Action	Action
CreateDBInstance	ModifyDBInstanceSpec

DeleteDBInstance	RenewDBInstance
CreateShardingDBInstance	DeleteNode
ModifyNodeSpec	CreateNode
RestartDBInstance	ModifyDBInstanceMaintainTime
ModifyDBInstanceDescription	DescribeDBInstanceAttribute
DescribeReplicaSetRole	DescribeShardingNetworkAddress
ModifyDBInstanceNetworkType	ModifyDBInstanceNetExpireTime
DescribeAccounts	ResetAccountPassword
DescribeSecurityIps	ModifySecurityIps
DescribeAuditRecords	DescribeAuditFiles
DescribeBackupPolicy	ModifyBackupPolicy
CreateBackup	DescribeBackups
RestoreDBInstance	DescribeDBInstancePerformance
DescribeDBInstances	-

DescribeDBInstances indicates all the instances in the account are authorized. Authorization is not required for DescribeRegions.

Authorization rules of API

When a subaccount accesses resources through ApsaraDB for MongoDB API, the ApsaraDB for MongoDB background performs a permission verification on RAM to make sure that the caller has relevant permissions. Each ApsaraDB for MongoDB API determines the resource permissions that need to be checked based on the involved resources and the API semantics. The authorization rules for each API are shown in the following table.

Action	Authorization rules
CreateDBInstance	acs:dds:\$regionid:\$accountid:dbinstance/\$dbinstanc eid
ModifyDBInstanceSpec	acs:dds:\$regionid:\$accountid:dbinstance/\$dbinstanc eid
DeleteDBInstance	acs:dds:\$regionid:\$accountid:dbinstance/\$dbinstanc eid
RenewDBInstance	acs:dds:\$regionid:\$accountid:dbinstance/\$dbinstanc eid

CreateShardingDBInstance	acs:dds:\$regionid:\$accountid:dbinstance/\$dbinstanc eid
DeleteNode	acs:dds:\$regionid:\$accountid:dbinstance/\$dbinstanc eid
CreateNode	acs:dds:\$regionid:\$accountid:dbinstance/\$dbinstanc eid
ModifyNodeSpec	acs:dds:\$regionid:\$accountid:dbinstance/\$dbinstanc eid
DescribeDBInstances	acs:dds:\$regionid:\$accountid:dbinstance/\$dbinstanc eid
RestartDBInstance	acs:dds:\$regionid:\$accountid:dbinstance/\$dbinstanc eid
ModifyDBInstanceMaintainTime	acs:dds:\$regionid:\$accountid:dbinstance/\$dbinstanc eid
ModifyDBInstanceDescription	acs:dds:\$regionid:\$accountid:dbinstance/\$dbinstanc eid
DescribeDBInstanceAttribute	acs:dds:\$regionid:\$accountid:dbinstance/\$dbinstanc eid
DescribeReplicaSetRole	acs:dds:\$regionid:\$accountid:dbinstance/\$dbinstanc eid
DescribeShardingNetworkAddress	acs:dds:\$regionid:\$accountid:dbinstance/\$dbinstanc eid
ModifyDBInstanceNetworkType	acs:dds:\$regionid:\$accountid:dbinstance/\$dbinstanc eid
ModifyDBInstanceNetExpireTime	acs:dds:\$regionid:\$accountid:dbinstance/\$dbinstanc eid
DescribeDBInstancePerformance	acs:dds:\$regionid:\$accountid:dbinstance/\$dbinstanc eid
DescribeAccounts	acs:dds:\$regionid:\$accountid:dbinstance/\$dbinstanc eid
ResetAccountPassword	acs:dds:\$regionid:\$accountid:dbinstance/\$dbinstanc eid
DescribeSecurityIps	acs:dds:\$regionid:\$accountid:dbinstance/\$dbinstanc eid
ModifySecurityIps	acs:dds:\$regionid:\$accountid:dbinstance/\$dbinstanc eid
DescribeAuditRecords	acs:dds:\$regionid:\$accountid:dbinstance/\$dbinstanc eid
DescribeAuditFiles	acs:dds:\$regionid:\$accountid:dbinstance/\$dbinstanc eid
DescribeBackupPolicy	acs:dds:\$regionid:\$accountid:dbinstance/\$dbinstanc eid

ModifyBackupPolicy	acs:dds:\$regionid:\$accountid:dbinstance/\$dbinstanc eid
CreateBackup	acs:dds:\$regionid:\$accountid:dbinstance/\$dbinstanc eid
RestoreDBInstance	acs:dds:\$regionid:\$accountid:dbinstance/\$dbinstanc eid
DescribeBackups	acs:dds:\$regionid:\$accountid:dbinstance/\$dbinstanc eid
DescribeDBInstancePerformance	acs:dds:\$regionid:\$accountid:dbinstance/\$dbinstanc eid

Public parameters

Public request parameters are the request parameters used in each API.

Description of relevant parameters

Name	Type	Required or not	Description
Format	String	Yes	Type of the return value. JSON and XML formats are supported. The default value is XML.
Version	String	Yes	API version number, in the format of YYYY-MM-DD. The current version is 2015-12-01.
AccessKeyId	String	Yes	Your AccessKey ID issued by Alibaba Cloud.
Signature	String	Yes	Signature result string. For more information about the signature calculation method, see the signature mechanism description.
SignatureMethod	String	Yes	Signature method. Currently, HMAC-SHA1 is supported.

Timestamp	String	Yes	Request time stamp. The date format follows the ISO8601 standard and uses the UTC time. Format: YYYY-MM-DDThh:mm:ssZ. For example, 2016-01-01T12:00:00Z (20:00:00, January 1, 2016, Beijing time).
SignatureVersion	String	Yes	Signature algorithm version. The current version is 1.0.
SignatureNonce	String	Yes	Unique random number, which is used to prevent network replay attacks. You must use different random numbers for different requests.

Example

```
https://mongodb.aliyuncs.com/
?Format=json
&Version=2015-12-01
&Signature=Pc5WB8gokVn0xfeu%2FZV%2BiNM1dgI%3D
&SignatureMethod=HMAC-SHA1
&SignatureNonce=15215528852396
&SignatureVersion=1.0
&AccessKeyId=key-test
&Timestamp=2016-01-01T12:00:00Z
```

Public response parameters

The system returns a unique identification code (RequestId) each time you send a request to call an interface, no matter whether the call succeeds or not.

Example

```
<?xml version="1.0" encoding="utf-8"?>
<!--Result root node-->
<Interface name + Response>
<!--Return request tag-->
<RequestId>4C4fdsf38-3910-447D-87AD-AC078932216</RequestId>
<!--Return result data-->
```

```
</Interface name + Response>
```

Return results

After an API is called, data is returned in a unified format. The returned HTTP status code 2xx indicates that the call is successful. The returned HTTP status code 4xx or 5xx indicates that the call fails. For a successful call, the primary formats of returned data are XML and JSON. When a request is sent, an external system can input parameters to specify the format of returned data. The default format is XML.

Note: In this document, examples of return results are formatted for viewing convenience. The actual returned results have no line breaks, indentation, or other layouts.

Successful results

XML results returned include a message stating if the request is successful and the specific service data. An example is as follows:

```
<?xml version="1.0" encoding="utf-8"?>
<!--Result root node-->
<Interface name + Response>
<!--Return request tag-->
<RequestId>4C4fdsf38-3910-447D-87AD-AC078932216</RequestId>
<!--Return result data-->
</Interface name + Response>
```

JSON example

```
{
  "RequestId": "4C4fdsf38-3910-447D-87AD-AC078932216",
  /* Return result data*/
}
```

Error results

After an error is reported in an API call, no result data is returned. The caller can refer to the table in the appendix Error Code Table to locate the cause of the error. When an error occurs in a call, an HTTP status code 4xx or 5xx is returned for the HTTP request. The returned message body contains the specific error code and error message. The message body also contains the globally unique RequestId and the requested HostId.

If the caller cannot identify the cause of the error, the caller can contact Alibaba Cloud Customer Service and provide the HostId and RequestId to help us solve the problem as quickly as possible.

An example is as follows:

```
<?xml version="1.0" encoding="UTF-8"?>
<Error>
<RequestId>8906582E-6722-409A-A6C4-0E7863B733A5</RequestId>
<HostId> mongodb.aliyuncs.com</HostId>
<Code>UnsupportedOperation</Code>
<Message>The specified action is not supported.</Message>
</Error>
```

JSON example

```
{
  "RequestId": "7463B73D-35CC-4D19-A010-6B8D65D242EF",
  "HostId": " mongodb.aliyuncs.com",
  "Code": "UnsupportedOperation",
  "Message": "The specified action is not supported."
}
```

Signature method

ApsaraDB for MongoDB performs identity authentication on each access request. Therefore, both the HTTP request and HTTPS request must contain signature information. ApsaraDB for MongoDB performs symmetric encryption to verify the request sender by using Access Key ID and Access Key Secret. The Access Key ID and Access Key Secret are officially issued to visitors by Alibaba Cloud (visitors can apply for and manage them at Alibaba Cloud's official website). The Access Key ID indicates the identity of the visitor. The Access Key Secret is the secret key used to encrypt and verify the signature string on the server. It must be kept confidential and only be available to Alibaba Cloud and the user. The following method is used to sign the access request:

Use request parameters to construct a canonicalized query string.

The request parameters are ordered alphabetically by the parameter names (this includes the "public request parameters" and custom parameters for the given request interfaces described in this document, but not the Signature parameter mentioned in "public request parameters").

Note: When a request is submitted using the GET method, the request parameters are the same as those included in the parameter section of the request URI. That is, the section of the URI following the question mark (?)

and connected by the and sign (&).

The name and value of each request parameter are encoded. URL encoding using the UTF-8 character set is required. URL encoding rules are as follows:

- a. Upper case letters from A to Z, lowercase letters from a to z, integers from 0 to 9, and other characters including the en dashes (-), underlines (_), periods (.), and tildes (~) are not encoded.
- b. Other characters are encoded in %XY format, with XY representing the characters' ASCII code in hexadecimal notation. For example, double quotation marks (") are encoded as %22.
- c. Extended UTF-8 characters are encoded in %XY%ZA... format. It must be noted that an English space () is encoded as %20, rather than the plus sign (+).

NOTE: Generally, libraries that support URL encoding (for example, java.net.URLEncoder of Java) are all encoded according to the rules for the "application/x-www-form-urlencoded" MIME-type. You can use this encoding method directly by replacing the plus sign (+) with %20 and the asterisk (*) with %2A in the encoded string, and change %7E back to the tilde (~) to conform to the preceding encoding rules.

Connect the encoded parameter names and values with the equal sign (=).

Then, sort the parameter name and value pairs connected by equal signs in alphabetical order, and connect them with the & symbol to produce the Canonicalized Query String.

Use the canonicalized query string to construct the string for signature calculation according to the following rules:

```
StringToSign=
HTTPMethod + "&" +
percentEncode( "/" ) + "&" +
percentEncode(CanonicalizedQueryString)
```

Here, HTTPMethod is the HTTP method used for request submission. For example, GET. percentEncode("/") is the coded value for the character / according to the URL encoding rules described in 1.b, namely, %2F. The percentEncode(CanonicalizedQueryString) is the Canonicalized Query String (constructed in Step 1) that is encoded according to the URL encoding rules described in 1.b.

According to RFC2104 definitions, use the preceding signature string to calculate the signature's HMAC value.

NOTE: When calculating the signature, the Key is your Access Key Secret appended with the and sign (&) (ASCII:38). The SHA1 hashing algorithm is used.

According to Base64 encoding rules, encode the preceding HMAC value into a string to obtain the signature value.

Add the obtained signature value as the Signature parameter to the request parameters to complete the request signing process.

Note: When the obtained signature value is submitted to the ApsaraDB for RDS server as the final request parameter value, the value is URL encoded like other parameters according to RFC3986 rules. DescribeDBInstances is used as an example. The request URL prior to signing is as follows:

```
http://mongodb.aliyuncs.com/?TimeStamp=2016-01-01T10:33:56Z&Format=XML&AccessKeyId=testid&Action=DescribeInstances&SignatureMethod=HMAC-SHA1&RegionId=region1&SignatureNonce=NwDAxvLU6tFE0DVb&Version=2015-12-01&SignatureVersion=1.0
```

The StringToSign is:

```
GET&%2F&AccessKeyId%3Dtestid&Action%3DDescribeInstances&Format%3DXML&RegionId%3Dregion1&SignatureMethod%3DHMAC-SHA1&SignatureNonce%3DNwDAxvLU6tFE0DVb&SignatureVersion%3D1.0&TimeStamp%3D2016-01-01T10%253A33%253A56Z&Version%3D2015-01-01
```

Assume that the Access Key ID parameter value is testid, the Access Key Secret parameter value is testsecret, the key used for HMAC calculation is testsecret& and the calculated signature value is:

```
BIPOMlu8LXBeZtLQkJTw6iFvw1E=
```

The signed request URL is (with the Signature parameter added):

```
http://mongodb.aliyuncs.com/?TimeStamp=2016-01-01T10%3A33%3A56Z&Format=XML&AccessKeyId=testid&Action=DescribeInstances&SignatureMethod=HMAC-SHA1&RegionId=region1&SignatureNonce=NwDAxvLU6tFE0DVb&SignatureVersion=1.0&Version=2015-12-01&Signature=BIPOMlu8LXBeZtLQkJTw6iFvw1E%3D
```

Instance management

DescribeRegions

Description

This interface is applicable to both replica set and sharding instances.

Name	Type	Required or not	Description
Action	String	Yes	Required parameter, value: DescribeRegions.
RegionId	String	No	Region ID
ZoneId	String	No	Zone

Response parameters

Name	Type	Description
Public response parameters	-	For more information, see public response parameters.

Region data structure

Name	Type	Description
RegionId	String	Region ID, for example, cn-beijing.
Zones	List<Zones>	Zone information

Zones

Name	Type	Description
ZoneId	String	Zone ID, for example, cn-

		beijing-a.
VpcEnabled	String	Whether VPC is supported.

DescribeDBInstances

Description

This API supports both replica set instances and sharded cluster instances.

Input parameters

Name	Type	Required or not	Description
Action	String	Yes	Required parameter, value: DescribeDBInstances .
RegionId	String	Yes	Instance region ID, which can be viewed using the DescribeRegions function.
Engine	String	No	Database type, value: ApsaraDB for MongoDB.
DBInstanceType	String	No	- Type of the instance to be queried. If it is set to sharding, The sharded cluster instances are listed. - If it is set to replicate, replica set instances are listed. Default value: replicate
PageSize	Integer	No	Number of records per page; optional values: 30, 50, and 100. Default value: 30
PageNumber	Integer	No	Page number. It

			must be greater than 0 and no greater than the Integer' s maximum value. Default value: 1
--	--	--	---

Response parameters

Name	Type	Description
Public response parameters	-	For more information, see public response parameters.
DBInstances	List<DBInstance>	Array composed of DBInstances

DBInstance data structure

Name	Type	Description
DBInstanceId	String	Instance ID
DBInstanceDescription	String	Instance description
RegionId	String	ID of the region to which the instance belongs
ZoneId	String	ID of the zone to which the instance belongs
Engine	String	Database type
EngineVersion	String	Database version
DBInstanceClass	String	Instance type
DBInstanceStorage	Integer	Disk
DBInstanceStatus	String	Instance status. For more information, see the instance status table.
ChargeType	String	Billing method: - PrePaid: Yearly/monthly subscription - Postpaid: Pay-As-You-Go
NetworkType	String	Network type: - Classic: Classic network - VPC: VPC
CreationTime	String	Creation time, in the format of YYYY-MM-DD 'T' hh:mm:ssZ, for example, 2011-05-30T12:11:4Z.

ExpireTime	String	Expiration time
DBInstanceType	String	Instance type; optional values: sharding and replicate.
MongosList	List<Mongos>	Array composed of Mongos
ShardList	List<Shard>	Array composed of shards
LastDowngradeTime	Integer	Time of the last downgrade

Mongos

Name	Type	Description
NodeId	String	Mongos instance ID
NodeDescription	String	Mongos instance description.
NodeClass	String	Mongos specification

Shard

Name	Type	Description
NodeId	String	Shard instance ID
NodeDescription	String	Shard instance description
NodeClass	String	Shard instance specification
NodeStorage	Integer	Shard disk

RestartDBInstance

Description

This API supports both replica set instances and sharded cluster instances.

Input parameters

Name	Type	Required or not	Description
Action	String	Yes	Required parameter;

			value: RestartDBInstance.
DBInstanceId	String	Yes	Instance ID. The logic ID of a Sharding instance can be input.
NodeId	String	No	Sharding sub-instance ID. Set this parameter to mongos or shard node ID. In this case, only the input node is restarted, instead of the entire instance.If the parameter is left blank, the entire cluster is restarted.

Response parameters

Name	Type	Description
Public response parameters	-	For more information, see public response parameters.

ModifyDBInstanceMaintainTime

Description

This API supports replica set instances only.

Request parameters

Name	Type	Required or not	Description
Action	String	Yes	Required parameter; value: ModifyDBInstanceMaintainTime.
DBInstanceId	String	Yes	Name of the primary instance

StartTime	String	Yes	Maintenance start time
EndTime	String	Yes	Maintenance end time

Response parameters

Name	Type	Description
Public response parameters	-	For more information, see public response parameters.

ModifyDBInstanceDescription

Description

This API supports both replica set instances and sharded cluster instances.

Input parameters

Name	Type	Required or not	Description
Action	String	Yes	Required parameter; value: ModifyDBInstanceDescription.
DBInstanceId	String	Yes	Instance name
NodeId	String	No	IDs of instances of shard type that are successfully input to mongos or shard nodes.
DBInstanceDescription	String	Yes	- Instance description. - It cannot start with http://, https. - It must start with a Chinese character or an English letter. - It can contain 2 to 256 characters, which can be English

			letters, Chinese characters, underscores (_), hyphens (-), and numbers.
--	--	--	---

Response parameters

Name	Type	Description
Public response parameters	-	For more information, see public response parameters.

DescribeDBInstanceAttribute

Description

This API supports both replica set instances and sharded cluster instances.

Input parameters

Name	Type	Required or not	Description
Action	String	Yes	Required parameter; value: DescribeDBInstanceAttribute.
DBInstanceId	String	Yes	Instance ID. Multiple instance names can be entered at one time and are separated by commas (.). Up to 30 instance names can be entered.

Response parameters

Name	Type	Description
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Public response parameters	-	For more information, see public response parameters.
DBInstances	List<DBInstance>	-

DBInstance parameters

Name	Type	Description
DBInstanceId	String	Instance ID
DBInstanceDescription	String	Instance description
RegionId	String	ID of the region to which the instance belongs
ZoneId	String	ID of the zone to which the instance belongs
Engine	String	Database type
EngineVersion	String	Database version
DBInstanceClass	String	Instance type
DBInstanceStorage	String	Instance disk
DBInstanceStatus	String	Instance status. For more information, see the instance status table.
ChargeType	String	Billing method: - PrePaid: Yearly/monthly subscription - Postpaid: Pay-As-You-Go
ReplicaSetName	String	Name of the instance replica set
CreationTime	String	Instance creation time
ExpireTime	String	Expiration time. Pay-As-You-Go instances never expire.
MaintainStartTime	String	Maintenance start time
MaintainEndTime	String	Maintenance end time
NetworkType	String	- Classic: Classic network - VPC: VPC
DBInstanceType	String	Sharding or replicate
LastDowngradeTime	Integer	Time of the latest downgrade
MongosList	List<MongosAttribute>	Mongos list, which is not left blank when DBInstanceType is set to sharding.
ShardList	List<ShardAttribute>	Shard list, which is not left

		blank when DBInstanceType is set to sharding.
--	--	---

Name	Type	Description
Public response parameters	-	For more information, see public response parameters.
OrderId	String	Order ID

MongosAttribute parameters

Name	Type	Description
NodeId	String	Mongos instance ID
NodeDescription	String	Mongos instance description
NodeClass	String	Mongos instance specification
ConnectString	String	Mongos instance connection string
Port	String	Mongos instance port

ShardAttribute parameters

Name	Type	Description
NodeId	String	Shard instance ID
NodeDescription	String	Shard instance description
NodeClass	String	Shard instance specification
OrderId	String	Order ID
NodeStorage	String	Shard storage space

DescribeReplicaSetRole

Description

This API supports replica set instances only.

Input parameters

Name	Type	Required or not	Description
Action	String	Yes	Required parameter; value: DescribeReplicaSetRole.
DBInstanceId	String	Yes	Instance ID

Response parameters

Name	Type	Description
Public response parameters	-	For more information, see public response parameters.
DBInstanceId	String	Instance ID
ReplicaSets	List<ReplicaSet>	List of replica set roles

ReplicaSetRole data structure

Name	Type	Description
ReplicaSetRole	String	Replica set roles: Primary or Secondary
ConnectionDomain	String	Instance connection domain name
ConnectionPort	String	Instance connection port
ExpiredTime String	String	Remaining duration of the classic network address, in seconds
NetworkType	String	List of replica set roles
ReplicaSets	List<ReplicaSet>	Network type: - VPC: Private network - Classic: Classic network - Public: Public network

DescribeShardingNetworkAddress

Description

This API supports sharded cluster instances only.

Request parameters

Name	Type	Required or not	Description
Action	String	Yes	Required parameter; value: DescribeShardingNetworkAddress.
DBInstanceId	String	Yes	Sharding logic instance name
NoId	String	No	- Input the ApsaraDB for Mongos ID of the sharding instance. - If this parameter is left blank, connection information about all Mongos under the sharding is returned.

Response parameters

Name	Type	Description
Public response parameters	-	See public response parameters.
NetworkAddresses	List<NetworkAddress>	Information of the instance connection address

NetworkAddress

Name	Type	Description
Public response parameters		See public response parameters.
NetworkAddress	String	DNS connection string
IPAddress	String	IP address
NetworkType	String	- VPC: Connection address of

		a private network - Classic: Connection address of a classic network - Public: Connection address of a public network
Port	String	Port
VPCId	String	VPC ID, which is returned for VPC addresses.
VswitchId	String	VSwitch ID, which is returned for VPC addresses.
NodeId	String	If the parameter is set to sharding, the corresponding node ID (Mongos ID) is returned.
ExpiredTime	String	Remaining duration of the classic network address, in seconds.

ModifyDBInstanceNetworkType

Description

This API supports both replica set instances and sharded cluster instances.

Input parameters

Name	Type	Required or not	Description
Action	String	Yes	Required parameter; value: ModifyDBInstanceNetworkType.
DBInstanceId	String	Yes	Instance ID
NetworkType	String	Yes	The target network type: VPC: Switch to VPC. Classic: Switch to classic network.
RetainClassic	String	No	- True: Retain the classic network address.

			- False: Do not retain the classic network address.
ClassicExpiredDays	Integer	No	Retention duration of classic network. When RetainClassic is set to True, this parameter cannot be left blank. The unit is days, and the maximum value is 180 days.
VpcId	String	No	When an instance is switched from a classic network to VPC, this parameter is required.
VSwitchId	String	No	VswitchId When an instance is switched from a classic network to VPC, this parameter is required.

Response parameters

Name	Type	Description
Public response parameters	-	For more information, see public response parameters.

ModifyDBInstanceNetExpireTime

Description

This API supports both replica set instances and sharded cluster instances.

Input parameters

Name	Type	Required or not	Description
Action	String	Yes	Required parameter;

			value: ModifyDBInstanceNetExpireTime.
DBInstanceId	String	Yes	Instance ID
ConnectionString	String	Yes	Connection string
ClassicExpendExpire dDays	Integer	Yes	Retention days

Response parameters

Name	Type	Description
Public response parameters	-	For more information, see public response parameters.

Life cycle management

CreateDBInstance

Description

- This API supports replica set instances only.
- This API supports both data restoration and instance clone functions.

Input parameters

Name	Type	Required or not	Description
Action	String	Yes	Required parameter; value: CreateDBInstance.
RegionId	String	Yes	- Region ID, no longer than 50 characters. - You can use the DescribeRegions

			function to view IDs of available regions.
ZoneId	String	No	Zone ID. You can use the DescribeRegions function to view available zones.
Engine	String	Yes	Database type; value: ApsaraDB for MongoDB.
EngineVersion	String	Yes	Database version number; optional values: 3.2 or 3.4.
StorageEngine	String	No	Storage engine; optional values: WiredTiger or RocksDB. Default value: WiredTiger.
DBInstanceClass	String	Yes	Instance specification. For optional values, see the attached table of instance specification.
DBInstanceClass	String	Yes	Instance specification. For optional values, see the attached table of instance specification.
DBInstanceStorage	Integer	Yes	- Custom storage space; value range: [5, 1,000] for ApsaraDB for MongoDB. - 5-GB increments. Unit: GB.
DBInstanceDescription	String	No	- Instance description or remarks, with a length of 2 to 256 characters. - It must start with a Chinese character or an English letter and can consist of Chinese and English characters, underlines (<u> </u>), <i>hyphens</i> (-), and

			<i>numbers.</i>
SecurityIPList	String	No	- List of IP addresses allowed to access all databases in this instance. IP addresses are separated by commas (,) and no duplicate is allowed. The list can contain a maximum of 1,000 IP addresses. - Supported formats are as follows: %, 0.0.0.0/0, 10.23.12.24 (IP), or 10.23.12.24/24 (CIDR mode; classless inter-domain routing; /24 indicates the length of the prefix in the IP address; the prefix length ranges from 1 to 32). 0.0.0.0/0 indicates no restriction. By default, no access restriction is applied.
AccountPassword	String	No	Password of the root account. It is a string of 6 to 32 characters and is composed of letters, numbers, and underlines ().
ChargeType	String	No	Payment mode: PrePaid and PostPaid. PrePaid indicates yearly/monthly subscription and PostPaid indicates Pay-As-You-Go. Default value: PostPaid.
Period	Integer	No	Expiration time of yearly/monthly subscription instances. If the charge type is set to PrePaid, the optional values are as follows: 1-9, 12, 24, and 36. Unit: months.

ClientToken	String	Yes	- It is used to guarantee the idempotence of the request. The value is generated by the client. It must be unique among all requests and contain a maximum of 64 ASCII characters. - For more information, see the Appendix: How to Guarantee Idempotence.
NetworkType	String	No	Network type of an instance. Optional values: Classic and VPC. Default value: Classic.
VpcId	String	No	Virtual private cloud (VPC) ID. If NetworkType is set to VPC, this parameter is required.
VSwitchId	String	No	VSwitch ID. If NetworkType is set to VPC, this parameter is required.
DBInstanceId	String	No	This parameter must be specified when a paid instance is created based on an instance backup set. Buy pages of the first stage support Pay-As-You-Go only.
BackupId	String	No	Specific backup set ID
RestoreTime	String	No	Time point when a cloned instance is restored.

Response parameters

Name	Type	Description
Public response parameters	-	For more information, see

		public response parameters.
DBInstanceId	String	Instance ID
OrderId	String	Order ID

ModifyDBInstanceSpec

Description

This API supports replica set instances only.

Input parameters

Name	Type	Required or not	Description
Action	String	Yes	Required parameter; value: ModifyDBInstanceSpec.
DBInstanceId	String	Yes	ID of the instance to be upgraded/downgraded
DBInstanceClass	String	No	Instance specification. For optional values: see the attached table of instance specification.
OrderType	String	No	Type of configuration change: - Upgrade: Upgrade - Downgrade: Downgrade - The default value is Degrade. For yearly/monthly subscribed instances, this parameter cannot be left blank. For Pay-As-You-Go instances, this

			parameter can be left blank.
DBInstanceStorage	Integer	No	- Custom storage space; value range: [5, 1,000] for ApsaraDB for MongoDB. - 5-GB increments. Unit: GB.

Response parameters

Name	Type	Description
Public response parameters	-	For more information, see public response parameters .
OrderId	String	Order ID

DeleteDBInstance

Description

This API supports both replica set instances and sharded cluster instances.

Input parameters

Name	Type	Required or not	Description
Action	String	Yes	Required parameter; value: DeleteDBInstance.
DBInstanceId	String	Yes	Instance ID

Response parameters

Name	Type	Description
Public response parameters	String	For more information, see public response parameters .

RenewDBInstance

Description

This API supports replica set instances only.

Input parameters

Name	Type	Required or not	Description
Action	String	Yes	Required parameter; value: RenewDBInstance.
DBInstanceId	String	Yes	Instance ID
Period	Integer	Yes	Renewal duration; optional values: 1–9, 12, 24, and 36.
ClientToken	String	Yes	It is used to guarantee the idempotence.

Response parameters

Name	Type	Description
Public response parameters	-	For more information, see public response parameters.
OrderId	String	Order ID

CreateShardingDBInstance

Description

This API supports sharded cluster instances only.

Input parameters

Name	Type	Required or not	Description
Action	String	Yes	Required parameter; value: CreateShardingDBInstance.
RegionId	String	Yes	- Region ID, no longer than 50 characters. - You can use the DescribeRegions function to view IDs of available regions.
ZoneId	String	Yes	Zone ID. You can use the DescribeRegions function to view available zones.
Engine	String	Yes	Database type; value: ApsaraDB for MongoDB.
StorageEngine	String	No	Storage engine; optional values: WiredTiger or RocksDB. Default value: WiredTiger.
EngineVersion	String	Yes	Database version number; optional values: 3.2 or 3.4.
DBInstanceDescription	String	No	- Instance description or remarks, with a length of 2 to 256 characters. - It must start with a Chinese character or an English letter and can consist of Chinese and English characters, underlines (<code>_</code>), hyphens (<code>-</code>), and numbers (<i>Sharding instance description</i>).
Mongos.N.Class	String	Yes	Mongos specification. (Assume that a user

			can purchase N Mongos databases, and the value range of N is [2, 32]).
ReplicaSet.N.Class	String	Yes	Instance specification; optional values: see the instance type appendix (Assume that a user can purchase N replica sets, and the value range of N is [2, 32]).
ReplicaSet.N.Storage	Integer	Yes	- Custom storage space; value range: [10, 1,000] for ApsaraDB for MongoDB. - 10-GB increments. Unit: GB. (Assume that a user can purchase N replica sets, and the value range of N is [2, 32].)
ConfigServer.1.Class	String	Yes	ConfigServer specification
ConfigServer.1.Storage	Integer	Yes	Storage space of ConfigServers. Currently, only the 10-GB storage space is available.
SecurityIPList	String	No	- List of IP addresses allowed to access all databases in this instance. IP addresses are separated by commas (,) and no duplicate is allowed. The list can contain a maximum of 1,000 IP addresses. - Supported formats are as follows: %, 0.0.0.0/0, 10.23.12.24 (IP), or 10.23.12.24/24 (CIDR mode; classless inter-domain routing. /24 indicates the length of the prefix in the IP address; the prefix

			length ranges from 1 to 32). 0.0.0.0/0 indicates no restriction. By default, no access restriction is applied.
AccountPassword	String	No	Password of the root account. It is a string of 6 to 32 characters and is composed of letters, numbers, and underlines (_).
ChargeType	String	No	- Payment mode: PrePaid and PostPaid. PrePaid indicates yearly/monthly subscription and PostPaid indicates Pay-As-You-Go. - Default value: PostPaid. Currently, only PostPaid is available.
ClientToken	String	Yes	- It is used to guarantee the idempotence of the request. - The value is generated by the client. It must be unique among all requests and contain a maximum of 64 ASCII characters. For more information, see the Appendix: How to Guarantee Idempotence.
NetworkType	String	No	Network type of an instance. Optional values: Classic and VPC. Default value: Classic.
VpcId	String	No	VPC ID. If the instance network type is VPC, this parameter cannot be left blank.
VSwitchId	String	No	VSwitch ID. If the instance type is VPC, this parameter

			cannot be left blank.
SrcDBInstanceId	String	No	- Source instance ID. Currently, only sharding instances can be cloned. (A replica set instance cannot be directly cloned as a sharding instance). - The number of sharding and replica set must be greater than the number of replica set files.
RestoreTime	String	No	A random UTC time point within seven days, precise to seconds.

Response parameters

Name	Type	Description
Public response parameters	-	For more information, see public response parameters.

CreateNode

Description

This API supports sharded cluster instances only.

Input parameters

Name	Type	Required or not	Description
Action	String	Yes	Required parameter; value: CreateNode
DBInstanceId	String	Yes	Primary instance ID
NodeClass	String	Yes	Node specification

NodeStorage	String	No	Node disk space. When the instance type is Shard, this parameter cannot be left blank.
NodeType	Integer	No	Node type; optional values: Mongos or Shard.
ClientToken	String	Yes	It is used to ensure the idempotence.

Response parameter

Name	Type	Description
Public response parameters	-	For more information, see public response parameters.

DeleteNode

Description

This API supports sharded cluster instances only.

Input parameters

Name	Type	Required or not	Description
Action	String	Yes	Required parameter; value: DeleteNode.
DBInstanceId	String	Yes	Primary instance ID.
NodeId	String	Yes	ID of the deleted sub-instance.
ClientToken	String	Yes	It is used to ensure the idempotence.

Response parameters

Name	Type	Description
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Public response parameters	-	For more information, see public response parameters.
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ModifyNodeSpec

Description

This API supports sharded cluster instances only.

Input parameters

Name	Type	Required or not	Description
Action	String	Yes	Required parameter; value: ModifyNodeSpec.
DBInstanceId	String	Yes	Primary instance ID
NodeId String	String	Yes	Sub-instance ID
NodeClass	String	Yes	Node specification
NodeStorage	String	No	Node disk space. Set this parameter for shard nodes.
ClientToken	String	No	Token. It is used to ensure the idempotence.

Response parameters

Name	Type	Description
Public response parameters	-	For more information, see public response parameters.

Account management

ResetAccountPassword

Description

This API supports both replica set instances and sharded cluster instances.

Input parameters

Name	Type	Required or not	Description
Action	String	Yes	Required parameter; value: ResetAccountPassword.
DBInstanceId	String	Yes	Instance ID
AccountName	String	Yes	Account name
AccountPassword	String	Yes	The new password can consist of letters, digits, or underscores, with a length of 6 to 32 characters.

Response parameters

Name	Type	Description
Public response parameters	String	For more information, see public response parameters.

DescribeAccounts

Description

This API supports both replica set instances and sharded cluster instances.

Input parameters

Name	Type	Required or not	Description
Action	String	Yes	Required parameter; value: DescribeAccounts.
DBInstanceId	String	Yes	Instance ID
AccountName	String	Yes	Account name

Response parameters

Name	Type	Description
Accounts	List<Account>	Array composed of accounts

Account data structure

Name	Type	Description
DBInstanceId	String	Name of the instance to which the account belongs
AccountName	String	Account name
AccountStatus	String	Account status: - Unavailable: The account cannot be used. - Available: The account can be used.
AccountDescription	String	Account remarks

ModifyAccountDescription

Description

This API supports both replica set instances and sharded cluster instances.

Input parameters

Name	Type	Required or not	Description
Action	String	Yes	Required parameter; value: ModifyAccountDescription.
DBInstanceId	String	Yes	Instance name
AccountName	String	Yes	Operation account
AccountDescription	String	Yes	- Modify account remarks. - It cannot start with http://, https. - It must start with a Chinese character or an English letter. - It can contain 2 to 256 characters, which can be English letters, Chinese characters, underscores (_), hyphens (-), and numbers.

Response parameters

Name	Type	Description
Public response parameters	-	For more information, see public response parameters.

Data safety management

DescribeSecurityIps

Description

This API supports both replica set instances and sharded cluster instances.

Input parameters

Name	Type	Required or not	Description
Action	String	Yes	Required parameter; value: DescribeSecurityIps.
DBInstanceId	String	Yes	Instance ID

Response parameters

Name	Type	Description
Public response parameters	-	For more information, see public response parameters.
SecurityIps	String	Default whitelist
SecurityIpGroups	List<SecurityIpGroup>	Group whitelist

SecurityIpGroup

Name	Type	Description
SecurityIpGroupName	String	Group name
SecurityIpList	String	IP address list
SecurityIpAttribute	String	Group attribute. By default, hidden groups are not displayed.

ModifySecurityIps

Description

This API supports both replica set instances and sharded cluster instances.

Input parameters

Name	Type	Required or not	Description
Action	String	Yes	Required parameter; value: ModifySecurityIps.
DBInstanceId	String	Yes	Instance ID
SecurityIps	String	Yes	List of IP addresses under the IP address whitelist array. The list contains up to 1,000 IP addresses, separated by commas. Supported formats include 0.0.0.0/0, 10.23.12.24 (IP), and 10.23.12.24/24 (Classless Inter-Domain Routing (CIDR) mode. 24 represents the length of the prefix in an IP address. The range of the prefix length is [1,32]). Up to 800 IP address whitelists are supported.
ModifyMode	String	Yes	Modification method. Optional values are as follows: - Cover: Cover the original whitelist. - Add: Add a whitelist. - Delete: Delete the whitelist.
SecurityIpGroupName	String	No	Name of the modified group. Default value: Default.
SecurityIpGroupAttribute	String	No	Group attribute. If the parameter is left blank, the response parameter is not modified.

Response parameters

Name	Type	Description
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Public response parameters	-	For more information, see public response parameters.
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DescribeAuditRecords

Description

Currently, this API supports replica set instances only.

Request parameters

Name	Type	Required or not	Description
Action	String	Yes	Required parameter; value: DescribeAuditRecords.
DBInstanceId	String	Yes	The input logic name of the primary instance named sharding.
StartTime	String	Yes	Query start time, format: yyyy-MM-dd' T' HH:mm:ssZ.
EndTime	String	Yes	Query end time, format: yyyy-MM-dd' T' HH:mm:ssZ, must be later than query start time.
NodeId	String	No	Sharding can be set to the ID of every Mongos or shard. Otherwise, no result is returned. This parameter is not required for replica set instances.
StartTime	String	Yes	Query start time. The format is yyyy-MM-dd' T' HH:mm:ssZ.
EndTime	String	Yes	Query end time. The format is yyyy-MM-

			dd' T' HH:mm:ssZ. It must be later than the query start time.
Database	String	No	Default value: All.
User	String	No	Default value: All.
Form	String	No	- File: Triggers the generation of audit logs. If this parameter is set to File, only public parameters are returned. In this case, you need to call the DescribeSQLLogFiles API to obtain the final download address of audit logs. - Stream: Default value. Data streams are returned.
QueryKeywords	String	No	Query keywords. Multiple keywords are separated by spaces. Up to 10 keywords are allowed.
PageSize	Integer	No	Number of records per page; optional values: 30, 50, and 100. Default value: 30.
PageNumber	Integer	No	Page number, which must be greater than 0 but must not exceed the maximum Integer value. Default value: 1.

Response parameters

Name	Type	Description
Public response parameters	-	For more information, see public response parameters .
TotalRecordCount	Integer	Total number of records.
PageNumber	Integer	Page number

PageRecordCount	Integer	Number of SQL log details on this page.
Items	List<SQLRecord>	SQL log details.
TotalRecordCount	Integer	Total number of records.

SQLRecord parameters

Name	Type	Description
DBName	String	Database name.
AccountName	String	Total number of records.
HostAddress	String	Client IP address.
Syntax	String	Executed statement.
TotalExecutionTimes	Long	Time consumed, in microseconds.
ReturnRowCounts	Long	Number of returned records.
ExecuteTime	String	Execution time. The format is yyyy-MM-dd' T' HH:mm:ssZ, for example, 2011-05-30 T12:11:20Z.
ThreadID	String	Thread ID.

DescribeAuditFiles

Description

Currently, this API supports replica set instances only.

Request parameters

Name	Type	Required or not	Description
Action	String	Yes	Required parameter; value: DescribeAuditRecords.
DBInstanceId	String	Yes	Name of the primary

			instance
NodeId	String	No	- The Sharding parameter can be set to display Mongos ID or shard ID. If this parameter is left blank, both IDs are displayed. - The replica is not required.

Response parameters

Name	Type	Description
Public response parameters	-	For more information, see public response parameters .
TotalRecordCount	Integer	Total number of records
PageNumber	Integer	Page number
PageRecordCount	Integer	Number of records on the current page
Items	List<LogFile>	Array composed of audit files

Log file parameters

Name	Type	Description
FileID	Integer	Document ID
DBInstanceId	String	Instance name
LogStatus String	String	- Success: Archiving is successful. - Failed: Archiving fails. - Generating: Archiving is being executed. - Initializing: Archiving is not started.
LogStartTime	String	Start time and end time of audit logs
LogEndTime	String	Start time of audit logs
LogDownloadURL	String	Download URL. The URL is a null string if the audit logs cannot be downloaded temporarily.
LogSize	Long	Log file size in bytes.

Backup and recovery management

DescribeBackupPolicy

Description

This API supports both replica set instances and sharded cluster instances.

Input parameters

Name	Type	Required or not	Description
Action	String	Yes	Required parameter; value: DescribeBackupPolicy.
DBInstanceId	String	Yes	Instance ID

Response parameters

Name	Type	Description
Public response parameters	-	For more information, see public response parameters.
BackupRetentionPeriod	String	Backup retention period, in days
PreferredBackupTime	String	Backup time, in the format of HH:mmZ- HH:mm Z.
PreferredBackupPeriod	String	Backup cycle. Options are as follows: - Monday - Tuesday - Wednesday - Thursday - Friday - Saturday - Sunday

ModifyBackupPolicy

Description

This API supports both replica set instances and sharded cluster instances.

Input parameters

Name	Type	Required or not	Description
Action	String	Yes	Required parameter; value: ModifyBackupPolicy.
DBInstanceId	String	Yes	Instance ID
PreferredBackupTime	String	Yes	Backup time, in the format of HH:mmZ-HH:mmZ.
PreferredBackupPeriod	String	Yes	Backup cycle. Options are as follows: - Monday - Tuesday - Wednesday - Thursday - Friday - Saturday - Sunday

Response parameters

Name	Type	Description
Public response parameters	-	For more information, see public response parameters.

CreateBackup

Description

This API supports both replica set instances and sharded cluster instances.

Input parameters

Name	Type	Required or not	Description
Action	String	Yes	Required parameter; value: CreateBackup.
DBInstanceId	String	Yes	Instance ID

Response parameters

Name	Type	Description
Public response parameters	-	For more information, see public response parameters.
BackupId	String	Backup ID

DescribeBackups

Description

This API supports both replica set instances and sharded cluster instances.

Input parameters

Name	Type	Required or not	Description
Action	String	Yes	Required parameter; value: DescribeBackups.
DBInstanceId	String	Yes	Instance ID
BackupId	Integer	No	Backup ID

NodeId	String	No	The sharding instance type is valid. ID of the input instance on the shard node.
Unavailable	String	No	Location where the backup set is stored; optional values: OSS and Archive Storage. Default value: OSS
PageSize	Integer	No	Number of records per page; optional values: 30, 50, and 100. Default value: 30.
PageNumber	Integer	No	Page number. It must be greater than 0 and no greater than the Integer' s maximum value. Default value: 1

Response parameters

Name	Type	Description
Public response parameters	-	For more information, see public response parameters.
Items	List<Backup>	Array composed of backups
PageNumber	Integer	Page number
TotalCount	Integer	Total number of backups
PageSize	Integer	Number of records per page

Backup data structure

Name	Type	Description
BackupDBNames (TBD)	String	List of DBs in the backup set. Multiple DBs are separated by commas (,), in the format of "Db1,Db2,Db3..." . Check whether the entire database is backed up.
BackupId	Integer	Backup ID
BackupStatus	String	Backup status: - Success: The backup is

		successful. - Failed: The backup fails.
BackupStartTime	String	Start time of this backup, in the format of YYYY-MM-DD' T' hh:mm:ssZ.
BackupEndTime	String	End time of this backup in the format of YYYYMM-DD' T' hh:mm:ssZ.
BackupType	String	Backup type: - FullBackup: Full backup - IncrementalBackup: Incremental backup
BackupMode	String	Backup mode: - Automated: Automatic backup - Manual: Manual backup
BackupMethod	String	Backup method: - Logical: Logical backup - Physical: Physical backup
BackupDownloadURL	String	Download URL. If the backup cannot be downloaded at the moment, this parameter is set to a null string.
BackupSize	Long	Backup file size in bytes.

RestoreDBInstance

Description

This API supports replica set instances only.

Input parameters

Name	Type	Required or not	Description
Action	String	Yes	Required parameter; value: RestoreDBInstance.
DBInstanceId	String	Yes	Instance name. Only replica set instances are supported.

BackupId	String	Yes	Backup ID
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Response parameters

Name	Type	Description
Public response parameters	-	For more information, see public response parameters.

Performance monitoring management

DescribeDBInstancePerformance

Description

This API supports both replica set instances and sharded cluster instances.

Input parameters

Name	Type	Required or not	Description
Action	String	Yes	Required parameter; value: DescribeDBInstance Performance.
DBInstanceId	String	Yes	Instance ID
NodeId	String	No	- This parameter is required for shared cluster instances. - Input Mongos or shard node instance IDs to query the performance of a single component.
StartTime	String	Yes	Query start timeFormat: yyyy- MM- dd' T' HH:mm:ssZ.

			For example, 2011-05-30 T12:11:20ZTime format: GMT
EndTime	String	Yes	Query end timeFormat: yyyy-MM-dd' T' HH:mm:ssZF or example, 2011-05-30 T12:11:20ZTime format: GMT
ReplicaSetRole	String	Yes	Replica set roles; value: Primary or Secondary.
Key	String	Yes	Performance indicator. Multiple indicators are separated by the commas (,). For more information, see the Performance Parameter Table.

Response parameters

Name	Type	Description
Public response parameters	-	For more information, see public response parameters.
DBInstanceId	String	Instance ID
Engine	String	Database type
StartTime	String	Query start time in the format of YYYYMM-DD' T' HH:mmZ. For example: 2011- 05-30T03:29Z
EndTime	String	Query end time in the format of YYYYMM-DD' T' HH:mmZ. For example: 2011- 05-30T03:29Z. It must be later than the start time.
PerformanceKeys	List<PerformanceKey>	Array format: {perf1, perf2, perf3, ...}.

PerformanceKey parameters

Name	Type	Description
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Key	String	Performance parameter
Unit	String	Display unit
ValueFormat	String	Value format. - If it is null, VALUE is a final value. - If it is not null, VALUE needs to be resolved and separated with "&" , for example, com_delete&com_insert&com_insert_select&com_replace.
Values	List<PerformanceValue>	Array format: {value1, value2, ...}

Performance parameter value list PerformanceValue

Name	Type	Description
Value	String	Performance value
Date	String	Calculation date in the format of "yyyy-MMdd' T' HH:mm:ssZ" , for example, 2011-05-30T03:29:00Z.

Performance parameter table

Metric	Key
CPU Usage	CpuUsage
Memory Usage	MemoryUsage
IOPS Usage	MongoDB_IOPS
IOPS Usage	IOPSUsage
Used Disk Space	MongoDB_DetailedSpaceUsage
Disk Space Usage	DiskUsage
Opcounters	MongoDB_Opcounters
Connections	MongoDB_Connections
Cursors	MongoDB_Cursors
NetWork	MongoDB_Network
GlobalLock	MongoDB_Global_Lock_Current_Queue
WiredTiger	MongoDB_Wt_Cache

Appendix

Error code table

Error code description	Code	Message	httpStatusCode
The subaccount is not authorized to call the API.	Forbidden.RAM	User not authorized to operate on the specified resource, or this API doesn't support RAM.	403
The operation is not allowed in RAM mode.	Forbidden.NotSupportRAM	This action does not support accessed by RAM mode.	403
The server has an error.	ServiceUnavailable	The request has failed due to a temporary failure of the server.	503
The specified instance status does not exist.	InvalidStatus.NotFound	The Status provided does not exist in our records.	404
The input parameter is invalid.	InvalidParameter	The specified parameter "InstanceName" is invalid.	400
A non-administrator user calls the management API.	Forbidden.NotAdminUser	User not authorized to operate on the specified API as you are not the administrator.	403
The parameter is missing.	MissingParameter	Specified parameter is missing.	400
At least one of the InstanceName and NewPassword parameters is included.	MissingParameter	InstanceName/New Password at least one is required for this action.	400

No OwnerId is specified when this API is called.	MissingParameter	The input parameter OwnerId,OwnerAccount that is required for processing this request is not supplied.	403
The specified Token is invalid.	InvalidToken.Malformed	The specified parameter \"Token\" is invalid.	400
The specified InstanceName is invalid.	InvalidInstanceName.Malformed	The specified parameter \"InstanceName\" is invalid.	400
The specified Password is invalid.	InvalidPassword.Malformed	The specified parameter \"Password\" is invalid.	400
The specified Instances is invalid.	InvalidInstances.Malformed	The specified parameter \"Instances\" is invalid.	400
The specified StartTime is invalid.	InvalidStartTime.Malformed	The specified parameter \"StartTime\" is invalid.	400
The specified EndTime is invalid.	InvalidEndTime.Malformed	The specified parameter \"EndTime\" is invalid.	400
The specified InstanceIds is invalid.	InvalidInstanceIds.Malformed	The specified parameter \"InstanceIds\" is invalid.	400
The balance is insufficient.	InsufficientBalance	Your account does not have enough balance.	400
Real-name authentication is not performed for the account yet.	RealNameAuthenticationError	Your account has not passed the real-name authentication yet.	403
The instance quota exceeds.	QuotaExceed	Living afterpay instances quota exceeded.	400
The capacity configuration is invalid.	InvalidCapacity.NotFound	The capacity provided does not exist in our records.	400
A used client token is used for the	IdempotentParameterMismatch	Request uses a client token in a previous	400

request. However, the request content is different from the previous request with the used token.		request but is not identical to that request.	
Instances in the specified zone are not enough.	QuotaNotEnough	Quota not enough in this zone.	400
You are not authorized to call Order class APIs.	Forbidden.SubUser	The specified action is unavailable for you.	403
The access request is denied by Alibaba Cloud Risk Control system.	Forbidden.RiskControl	This operation is forbidden by Alibaba Cloud Risk Control system.	403
The specified region does not exist.	InvalidRegion.NotFound	The RegionId or ZoneId provided does not exist in our records.	404
The specified zone ID is invalid.	InvalidZoneId.NotFound	The ZoneId provided is invalid.	400
The instance ID does not exist.	InvalidInstanceId.NotFound	The InstanceId provided does not exist in our records.	404
The password is incorrect.	IncorrectPassword	The password provided is incorrect.	400
The service is unavailable.	ServiceNotSupported	The specified service is not supported.	400
A renewal and configuration change order is not effective yet.	HasRenewChangeOrder	This instance has a renewChange order.	400
There is an internal error.	InternalServerError	The request processing has failed due to some unknown error.	500
The backup time is invalid.	InvalidPreferredBackupTime	Specified preferred backup time is invalid.	400
The input backup type is invalid.	InvalidBackupType.Format	Specified backup type is invalid.	400
The input backup method is invalid.	InvalidBackupMethod.Format	Specified backup method is invalid.	400
The backup task already exists, which is not supported.	BackupJobExists	A backup job already exists in the specified DB instance.	400

The backup quota exceeds.	BackupTimesExceeded	Exceeding the daily backup times of this DB instance.	400
At least one parameter must be input.	ParameterLeastAssociate	Must input at least one optional parameter.	400
The input backup period is invalid.	InvalidBackupRetentionPeriod.Malformed	Specified backup retention period is invalid.	400
The input next backup time is invalid.	InvalidPreferredBackupTime.Format	Specified preferred backup time is invalid.	400
The input backup period is invalid.	InvalidPreferredBackupPeriod.Malformed	Specified backup period is invalid.	400
The current instance does not support this operation.	IncorrectDBInstanceType	Current DB instance type does not support this operation.	400
The input key is invalid.	InvalidKey.Malformed	Specified key is invalid.	400
The signature has been used.	SignatureNonceUsed	Specified signature nonce was used already.	400
No more virtual IP address can be assigned.	AllocateVpcIp.NotEnough	Ip resource is not enough	400
The specified type of instances cannot be created in the zone.	Zone.NotSupport	Specified zone does not support creating with instance class.	400
The specification code is invalid.	MissingClassCode	Capacity or InstanceClass is required for this action.	400
The specified instance type is not supported.	InvalidDBInstanceClass.NotFound	Specified DB instance class is not found.	404
The instance is locked.	IncorrectDBInstanceLockMode	Current DB instance lock mode does not support this operation.	400
The backup set ID does not exist.	InvalidBackupSetID.NotFound	Specified backup set ID does not exist.	400
This operation is not supported by the instance in current status.	IncorrectDBInstanceState	Current DB instance state does not support this operation.	400
The resource is	InsufficientResource	Insufficient capacity	400

insufficient.	Capacity	is available for the requested instance.	
The input end time is invalid.	InvalidEndTime.Format	Specified end time is invalid.	400
The duration for the reserved classic IP address is invalid.	InvalidClassicExpiredDays.Format	The specified classicExpiredDays format is invalid.	400
This operation is not supported by the backup set in the current status.	IncorrectBackupSetState	Current backup set state does not support operations.	400
The whitelist format is invalid.	InvalidSecurityIPList.Format	Specified security IP list format is invalid.	400

Instance specification table

See Instance specifications.

Instance status

Code	Description
CREATING	Creating
ACTIVATION	In use
DELETING	Deleting
RESTARTING	Restarting
CLASS_CHANGING	Upgrading/Downgrading
TRANSING	Migrating
VERSION_TRANSING	Migrating the version
DATABASE_TRANSING	Migrating the database
BACKUP_RECOVERING	Recovering from backup

DATA_IMPORTING	Importing data
DATABASE_IMPORTING	Importing the database
GUARD_SWITCHING	Switching due to disaster recovery
LINK_SWITCHING	Switching the link
NODE_CREATING	Creating the instance node
NODE_DELETING	Deleting the instance node
STATE_NET_CREATING	Establishing the network connection
STATE_NET_DELETING	Removing the network connection

Performance monitoring metrics

Metric	Key
CPU usage	CpuUsage
Memory usage	MemoryUsage
IOPS used amount	MongoDB_IOPS
IOPS usage	IOPSUsage
Occupied disk space	MongoDB_DetailedSpaceUsage
Disk space usage	DiskUsage
Opcounters	MongoDB_Opcounters
Connections	MongoDB_Connections
Cursors	MongoDB_Cursors
NetWork	MongoDB_Network
GlobalLock	MongoDB_Global_Lock_Current_Queue
WiredTiger	MongoDB_Wt_Cache