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Contents

API Documentation
  History
  Introduction
  API Category
  Call Method
    Request Structure
    Common Params
    Signature v3
    Signature
    Responses
Instance-Related APIs
  CreateDBInstance
  CreateDBInstanceHour
  TerminateDBInstance
  UpgradeDBInstance
  UpgradeDBInstanceHour
Error Codes

TencentDB for MongoDB API 2017
  Call Method
    Request Structure
      Request Structure Overview
      Common Request Parameters
      API Request Parameters
      Final Request Format
    Return Value
      Successful Response
      Error Response
      Error Codes
      Return Format for Async Task APIs
    Request Signature
Use Cases
Region API
  Query Available Specification
Instance API
  Query Price (Postpaid Plan)
  Create Instance (Postpaid Plan)
  Renew Instance (Postpaid Plan)
  Upgrade Instance (Postpaid Plan)
  Querying Order Details
  Query Instance List
  Set Auto-Renewal
  Resetting Instance Password
  Renaming Projects
  Renaming Instances
Querying Task Results
API Documentation

History

Last updated : 2019-09-09 15:18:00

The First Release

Release time: 2018-12-20 8:21:26 PM

The following changes are contained in this release:

The existing documents were improved.

APIs added:

- CreateDBInstance
- CreateDBInstanceHour
- TerminateDBInstance
- UpgradeDBInstance
- UpgradeDBInstanceHour
Built on the globally well-accepted MongoDB, TencentDB for MongoDB is a high-performance NoSQL database designed by Tencent Cloud. It features a full compatibility with the MongoDB protocol and offers a wealth of consistent monitoring and management, elastic scalability and automatic disaster recovery capabilities, which is suitable for document-based database scenarios.
## API Category

Last updated: 2019-09-09 15:18:00

### Instance-Related APIs

<table>
<thead>
<tr>
<th>API Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CreateDBInstanceHour</td>
<td>Creates a pay-as-you-go database instance</td>
</tr>
<tr>
<td>TerminateDBInstance</td>
<td>Terminates a pay-as-you-go database instance</td>
</tr>
<tr>
<td>UpgradeDBInstanceHour</td>
<td>Upgrades a pay-as-you-go database instance</td>
</tr>
</tbody>
</table>
Call Method
Request Structure

1. Service Address

In this product, your API requests are routed to the nearest server via the domain name mongodb.tencentcloudapi.com. You can also access APIs using the domain name for specified region, such as mongodb.ap-guangzhou.tencentcloudapi.com for Guangzhou region.

It is recommended to use the domain name for accessing the nearest server. When you call an API, this domain name is automatically resolved to a server in a region nearest to the client where the API is initiated. For example, when you initiate an API request in Guangzhou, this domain name is automatically resolved to a Guangzhou server, with the result same as that of using "mongodb.ap-guangzhou.tencentcloudapi.com".

Note: For business sensitive to latency, it is recommended to specify domain names containing the region.

The supported domain names are listed as below:

<table>
<thead>
<tr>
<th>Region</th>
<th>Domain Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accessing the nearest server (recommended, and is only for non-Finance regions)</td>
<td>mongodb.tencentcloudapi.com</td>
</tr>
<tr>
<td>South China (Guangzhou)</td>
<td>mongodb.ap-guangzhou.tencentcloudapi.com</td>
</tr>
<tr>
<td>East China (Shanghai)</td>
<td>mongodb.ap-shanghai.tencentcloudapi.com</td>
</tr>
<tr>
<td>North China (Beijing)</td>
<td>mongodb.ap-beijing.tencentcloudapi.com</td>
</tr>
<tr>
<td>Southwest China (Chengdu)</td>
<td>mongodb.ap-chengdu.tencentcloudapi.com</td>
</tr>
<tr>
<td>Southwest China (Chongqing)</td>
<td>mongodb.ap-chongqing.tencentcloudapi.com</td>
</tr>
<tr>
<td>China (Hong Kong)</td>
<td>mongodb.ap-hongkong.tencentcloudapi.com</td>
</tr>
<tr>
<td>Southeast Asia (Singapore)</td>
<td>mongodb.ap-singapore.tencentcloudapi.com</td>
</tr>
<tr>
<td>Asia Pacific (Bangkok)</td>
<td>mongodb.ap-bangkok.tencentcloudapi.com</td>
</tr>
<tr>
<td>Asia Pacific (Mumbai)</td>
<td>mongodb.ap-mumbai.tencentcloudapi.com</td>
</tr>
<tr>
<td>Asia Pacific (Seoul)</td>
<td>mongodb.ap-seoul.tencentcloudapi.com</td>
</tr>
<tr>
<td>Asia Pacific (Tokyo)</td>
<td>mongodb.ap-tokyo.tencentcloudapi.com</td>
</tr>
<tr>
<td>Eastern U.S. (Virginia)</td>
<td>mongodb.na-ashburn.tencentcloudapi.com</td>
</tr>
<tr>
<td>Western U.S. (Silicon Valley)</td>
<td>mongodb.na-siliconvalley.tencentcloudapi.com</td>
</tr>
<tr>
<td>Region</td>
<td>Domain Name</td>
</tr>
<tr>
<td>----------------------------</td>
<td>-------------------------------------------------------</td>
</tr>
<tr>
<td>North America (Toronto)</td>
<td>mongodb.na-toronto.tencentcloudapi.com</td>
</tr>
<tr>
<td>Europe (Frankfurt)</td>
<td>mongodb.eu-frankfurt.tencentcloudapi.com</td>
</tr>
<tr>
<td>Europe (Moscow)</td>
<td>mongodb.eu-moscow.tencentcloudapi.com</td>
</tr>
</tbody>
</table>

Note: Finance regions and non-Finance regions are isolated from each other. Therefore, when you access the services in a finance region (the common parameter Region is finance region), you need to specify a domain name containing the region specified in the Region field.

<table>
<thead>
<tr>
<th>Finance Region</th>
<th>Domain Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>East China (Shanghai Finance)</td>
<td>mongodb.ap-shanghai-fsi.tencentcloudapi.com</td>
</tr>
<tr>
<td>South China (Shenzhen Finance)</td>
<td>mongodb.ap-shenzhen-fsi.tencentcloudapi.com</td>
</tr>
</tbody>
</table>

2. Communication Protocol

All Tencent Cloud APIs communicate over HTTPS to provide high-security channels.

3. Request Methods

Supported HTTP request methods:

- POST (recommended)
- GET

Content-Type supported by POST request:

- application/json (recommended). The TC3-HMAC-SHA256 signature method is required.
- application/x-www-form-urlencoded. The HmacSHA1 or HmacSHA256 signature method is required.
- multipart/form-data (supported only in some APIs). The TC3-HMAC-SHA256 signature method is required.

The length of a GET request cannot exceed 32 KB. The length of a POST request using the HmacSHA1 and HmacSHA256 signature methods cannot exceed 1 MB.

4. Character Encoding

UTF-8 encoding is always used.
Common Params

Last updated: 2019-09-09 15:18:01

Common parameters are used for user identification and API authentication. Unless necessary, these parameters will not be discussed in each API document. A request must contain these parameters to be initiated successfully.

Signature Method v3

To adopt the TC3-HMAC-SHA256 signature method, common parameters must be put into the HTTP Header request header, as shown below:

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Type</th>
<th>Required</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>X-TC-Action</td>
<td>String</td>
<td>Yes</td>
<td>The name of the API for the operation to be performed. For example, if you want to call the CVM API &quot;Query Instance List&quot;, the Action parameter is DescribeInstances.</td>
</tr>
<tr>
<td>X-TC-Region</td>
<td>String</td>
<td>Yes</td>
<td>Identifies the region to which the data you want to work with belongs</td>
</tr>
<tr>
<td>X-TC-Timestamp</td>
<td>Integer</td>
<td>Yes</td>
<td>The current UNIX timestamp that records the time when the API request was initiated, for example, 1529223702. If the difference between the UNIX timestamp and the API server time is greater than 5 minutes, a signature expiration error may occur.</td>
</tr>
<tr>
<td>X-TC-Version</td>
<td>String</td>
<td>Yes</td>
<td>API version, such as 2017-03-12</td>
</tr>
</tbody>
</table>

Authorization

- TC3-HMAC-SHA256: signature method. This value is always used.
- Credential: signature credentials. AKIDEXAMPLE is SecretId; Date is UTC date, which must be consistent with the UTC date converted by the X-TC-Timestamp common parameter; service is the product name, which must be consistent with the called product domain name, such as CVM;
- SignedHeaders: Header information for signature computing. The content-type and host are required;
- Signature: signature digest.

X-TC-Token

The token used for a temporary certificate. It must be used with a temporary key. You can obtain the temporary key and token by calling a CAM API. No token is required for a long-term key.

If, for example, you want to query the list of CVM instances in the Guangzhou region, the request contains the request URL, request header and request body, as shown below:

Example of an HTTP GET request:

https://cvm.tencentcloudapi.com/?Limit=10&Offset=0

Authorization: TC3-HMAC-SHA256 Credential=AKIDz8krbsJ5yK8Qpn74WFKmLPx3EXAMPLE/2018-10-09/cvm/tc3_request, SignedHeaders=content-type;host, Signature=5da7a33f6993f0614b047e5df4582db9e9bf4672ba50567dba16c6ccf174c474
Example of an HTTP POST (application/json) request:

https://cvm.tencentcloudapi.com/

Authorization: TC3-HMAC-SHA256 Credential=AKIDEXAMPLE/2018-05-30/cvm/tc3_request, SignedHeaders=content-type;host, Signature=582c400e06b5924a6f2b5d7d672d79c15b13162d9279b0855cfa6789a8edbb4c
Content-Type: application/json
Host: cvm.tencentcloudapi.com
X-TC-Action: DescribeInstances
X-TC-Version: 2017-03-12
X-TC-Timestamp: 1527672334
X-TC-Region: ap-guangzhou

{"Offset":0,"Limit":10}

Example of an HTTP POST (multipart/form-data) request (only supported by specific APIs):

https://cvm.tencentcloudapi.com/

Authorization: TC3-HMAC-SHA256 Credential=AKIDEXAMPLE/2018-05-30/cvm/tc3_request, SignedHeaders=content-type;host, Signature=582c400e06b5924a6f2b5d7d672d79c15b13162d9279b0855cfa6789a8edbb4c
Content-Type: multipart/form-data; boundary=58731222010402
Host: cvm.tencentcloudapi.com
X-TC-Action: DescribeInstances
X-TC-Version: 2017-03-12
X-TC-Timestamp: 1527672334
X-TC-Region: ap-guangzhou

--58731222010402
Content-Disposition: form-data; name="Offset"

0
--58731222010402
Content-Disposition: form-data; name="Limit"

10
--58731222010402--

Signature Method v1

To adopt the HmacSHA1 and HmacSHA256 signature methods, common parameters must be put into the request string, as shown below:

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Type</th>
<th>Required</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offset</td>
<td>Number</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Limit</td>
<td>Number</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Parameter Name</td>
<td>Type</td>
<td>Required</td>
<td>Description</td>
</tr>
<tr>
<td>----------------</td>
<td>----------</td>
<td>----------</td>
<td>-------------</td>
</tr>
<tr>
<td>Action</td>
<td>String</td>
<td>Yes</td>
<td>The name of the API for the operation to be performed. For example, if you want to call the CVM API &quot;Query Instance List&quot;, the Action parameter is DescribeInstances.</td>
</tr>
<tr>
<td>Region</td>
<td>String</td>
<td>Yes</td>
<td>Identifies the region to which the data you want to work with belongs</td>
</tr>
<tr>
<td>Timestamp</td>
<td>Integer</td>
<td>Yes</td>
<td>The current UNIX timestamp that records the time when the API request was initiated, for example, 1529223702. If the difference between the value and the current system time is too large, a signature expiration error may occur.</td>
</tr>
<tr>
<td>Nonce</td>
<td>Integer</td>
<td>Yes</td>
<td>A random positive integer used in conjunction with Timestamp to prevent replay attacks</td>
</tr>
<tr>
<td>SecretId</td>
<td>String</td>
<td>Yes</td>
<td>An ID that the user applies for on the Cloud API Key Console for identity authentication. A SecretId is paired with a unique SecretKey, which is used to generate the request Signature.</td>
</tr>
<tr>
<td>Signature</td>
<td>String</td>
<td>Yes</td>
<td>Request signature, which is used to verify the validity of the request. It is generated based on input parameters. For more information on how to compute the signature, see the documentation about API authentication.</td>
</tr>
<tr>
<td>Version</td>
<td>String</td>
<td>Yes</td>
<td>API version, such as 2017-03-12.</td>
</tr>
<tr>
<td>SignatureMethod</td>
<td>String</td>
<td>No</td>
<td>Signature method. Supported methods are HmacSHA256 and HmacSHA1. The HmacSHA256 method is used to verify signatures only when the parameter is specified as HmacSHA256. Otherwise, HmacSHA1 is used.</td>
</tr>
<tr>
<td>Token</td>
<td>String</td>
<td>No</td>
<td>The token used for a temporary certificate. It must be used with a temporary key. You can obtain the temporary key and token by calling a CAM API. No token is required for a long-term key.</td>
</tr>
</tbody>
</table>

If, for example, you want to query the list of CVM instances in the Guangzhou region, the request contains the request URL, request header and request body, as shown below:

Sample of an HTTP GET request:

https://cvm.tencentcloudapi.com/?Action=DescribeInstances&Version=2017-03-12&SignatureMethod=HmacSHA256&Timestamp=1527672334&Signature=37ac2f4fde00b0ac99bd9eadeb459b1bbee224158d66e7ae5fcadb70b2d181d02&Region=ap-guangzhou&Nonce=23823223&SecretId=AKIDEXAMPLE

Host: cvm.tencentcloudapi.com
Content-Type: application/x-www-form-urlencoded

Sample of an HTTP POST request:

https://cvm.tencentcloudapi.com/

Host: cvm.tencentcloudapi.com
Content-Type: application/x-www-form-urlencoded

Action=DescribeInstances&Version=2017-03-12&SignatureMethod=HmacSHA256&Timestamp=1527672334&Signature=37ac2f4fde00b0ac99bd9eadeb459b1bbee224158d66e7ae5fcadb70b2d181d02&Region=ap-guangzhou&Nonce=23823223&SecretId=AKIDEXAMPLE
## Region List

The supported Region field values for all APIs in this product are listed as below. For any API that does not support any of the following regions, this field will be described additionally in the relevant API document.

<table>
<thead>
<tr>
<th>Region</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asia Pacific (Bangkok)</td>
<td>ap-bangkok</td>
</tr>
<tr>
<td>North China (Beijing)</td>
<td>ap-beijing</td>
</tr>
<tr>
<td>Southwest China (Chengdu)</td>
<td>ap-chengdu</td>
</tr>
<tr>
<td>Southwest China (Chongqing)</td>
<td>ap-chongqing</td>
</tr>
<tr>
<td>South China (Guangzhou)</td>
<td>ap-guangzhou</td>
</tr>
<tr>
<td>China (Hong Kong)</td>
<td>ap-hongkong</td>
</tr>
<tr>
<td>Asia Pacific (Mumbai)</td>
<td>ap-mumbai</td>
</tr>
<tr>
<td>Asia Pacific (Seoul)</td>
<td>ap-seoul</td>
</tr>
<tr>
<td>East China (Shanghai)</td>
<td>ap-shanghai</td>
</tr>
<tr>
<td>East China (Shanghai Finance)</td>
<td>ap-shanghai-fsi</td>
</tr>
<tr>
<td>South China (Shenzhen Finance)</td>
<td>ap-shenzhen-fsi</td>
</tr>
<tr>
<td>Southeast Asia (Singapore)</td>
<td>ap-singapore</td>
</tr>
<tr>
<td>Asia Pacific (Tokyo)</td>
<td>ap-tokyo</td>
</tr>
<tr>
<td>Europe (Frankfurt)</td>
<td>eu-frankfurt</td>
</tr>
<tr>
<td>Europe (Moscow)</td>
<td>eu-moscow</td>
</tr>
<tr>
<td>Eastern U.S. (Virginia)</td>
<td>na-ashburn</td>
</tr>
<tr>
<td>Western U.S. (Silicon Valley)</td>
<td>na-siliconvalley</td>
</tr>
<tr>
<td>North America (Toronto)</td>
<td>na-toronto</td>
</tr>
</tbody>
</table>
Signature v3

Last updated: 2019-09-09 15:18:01

Tencent Cloud API authenticates each access request, so each request is required to include the Signature in the common request parameters for user identity authentication. The signature is generated with user’s security credentials, which consist of a SecretId and a SecretKey. If you don’t have security credentials, apply for the credentials on the Cloud API Key page. Otherwise, you will not be able to call the cloud APIs.

Applying for Security Credentials

Before using cloud APIs for the first time, you need to apply for security credentials on the Cloud API Key page. Security credentials consist of a SecretId and a SecretKey:

- The SecretId: Identity of the API requester.
- The SecretKey: a key that can be used to encrypt the strings to create a signature so that Tencent Cloud server can validate the identity of the requester.
- The security credentials must be kept confidential to avoid leakage.

Apply for security credentials by following the steps below:

1. Log in to the Tencent Cloud Console.
2. Go to the Cloud API Key console page.
3. On the Cloud API Key page, click Create to create a pair of SecretId/SecretKey.

Note: A developer account can have two pairs of SecretId/SecretKey at most.

TC3-HMAC-SHA256 Signature Method

Note: For the GET method, only the Content-Type: application/x-www-form-urlencoded protocol format is supported. For the POST method, two protocol formats, Content-Type: application/json and Content-Type: multipart/form-data, are supported. The JSON format is supported by default for all business APIs, and the multipart format is supported only for specific business APIs. In this case, the API cannot be called in JSON format. See the specific business API documentation for more information.

The following shows how to compute signature by using CVM to query the instance list in Guangzhou zone. Only two parameters of "Query Instance List": Limit and Offset are used via the GET method.

For example, your SecretId and SecretKey are AKIDz8krbsJ5yKBZQpn74WFkmlPxn3EXAMPLE and Gu5t9xGARNpq86cd98joQYCN3EXAMPLE.

1. Splice specification request string

Splice specification request string (CanonicalRequest) in the following format:

```plaintext
CanonicalRequest = HTTPRequestMethod + '\n' + CanonicalURI + '\n' + CanonicalQueryString + '\n' + CanonicalHeaders + '\n'
```
SignedHeaders + \n + 
HashedRequestPayload

- **HTTPRequestMethod**: HTTP request method (GET and POST). GET is used in this example.
- **CanonicalURI**: URI parameter. Slash ("/") is used for API 3.0.
- **CanonicalQueryString**: query string for HTTP request URL, which is always an empty string for the POST request and a string after the question mark ("?") in URL for the GET request. Limit=10&Offset=0 is used in this example. Note: CanonicalQueryString must be URL encoded.
- **CanonicalHeaders**: header information for signature, including at least the host and content-type headers. Custom header for signature can also be added to improve the uniqueness and security of the request. Splicing rules: 1) The key and value headers are converted to lowercase, and the spaces at the start and end are removed. Splice in the format of key:value\n. 2) Multiple headers are spliced in the lexicographic order of the header key (lowercase).  

```
content-type:application/x-www-form-urlencoded
host:cvm.tenonetcloudapi.com
```

is used in this example.
- **SignedHeaders**: header information for signature. It specifies the headers for signature in the request, which correspond to the header content contained in CanonicalHeaders. The content-type and host headers are required. Splicing rules: 1) The header key is converted to lowercase. 2) Multiple header keys are spliced in the lexicographic order of the header key (lowercase) and separated by semicolons (";"). content-type;host is used in this example.
- **HashedRequestPayload**: hash value of the request body, which is computed by 

```
Lowercase(Hash.SHA256(RequestPayload))
```

After computing the SHA256 hash on the entire body payload of the HTTP request, it is encoded in hexadecimal format, and then the encoded string is converted into lowercase. Note: For GET requests, RequestPayload must be an empty string. For POST requests, RequestPayload is the body payload of the HTTP request.

Based on the above rules, the specification request string obtained in the example is as follows (For clarity, \"\n\" is removed by starting a new line.):

```
GET
/  
Limit=10&Offset=0
content-type:application/x-www-form-urlencoded
host:cvm.api.tencentyun.com

canonicalHeaders:content-type;host
hashedRequestPayload:e3b0c44298fc1c149afbf4c8996fb92427ae41e4649b934ca495991b7852b855
```

### 2. Splice string to be signed

Splice string to be signed in the following formats:

```
StringToSign =  
Algorithm + \n +  
RequestTimestamp + \n +  
CredentialScope + \n +  
HashedCanonicalRequest
```

- **Algorithm**: signature algorithm, which is always TC3-HMAC-SHA256;
- **RequestTimestamp**: request timestamp, which is the X-TC-Timestamp value of the request header, such as 1539084154 in the above example;
- **CredentialScope**: credential scope in the format of Date/service/tc3_request, including date, requested service and terminated string (tc3_request). Date is UTC date, which must be consistent with the UTC date converted by the X-TC-Timestamp common
parameter; service is the product name, which must be consistent with the called product domain name, such as CVM. 2018-10-09/cvm/tc3_request is used in the above example.

- HashedCanonicalRequest: hash value of the specification request string spliced in the above step. The computing method is Lowercase(HexEncode(Hash.SHA256(CanonicalRequest))).

Based on the above rules, the string to be signed in the example is as follows (For clarity, "\n" is removed by starting a new line):

```
TC3-HMAC-SHA256
1539084154
2018-10-09/cvm/tc3_request
91c9c192c14460df6c1ff69e34e6c5e90708de2a6d282ccf957dbf1aa7f3a7
```

3. Compute signature

1) Compute the derived signature key. Its pseudo code is as follows:

```
SecretKey = "Gu5t9xGARNpq86cd98joQYCN3EXAMPLE"
SecretDate = HMAC_SHA256("TC3" + SecretKey, Date)
SecretService = HMAC_SHA256(SecretDate, Service)
SecretSigning = HMAC_SHA256(SecretService, "tc3_request")
```

- SecretKey: Original SecretKey;
- Date: Value in the Date field in Credential, such as 2018-10-09 in the above example;
- Service: Value in the Service field in Credential, such as CVM in the above example;

2) Compute the signature. Its pseudo code is as follows:

```
Signature = HexEncode(HMAC_SHA256(SecretSigning, StringToSign))
```

- SecretSigning: Derived signature key obtained by computing;
- StringToSign: String to be signed in Step 2;

4. Splice Authorization

Splice Authorization in the following formats:

```
Authorization = Algorithm + ' ' +
    'Credential=' + SecretId + '/' + CredentialScope + ', ' +
    'SignedHeaders=' + SignedHeaders + ', ' +
    'Signature=' + Signature
```

- Algorithm: signature method, which is always TC3-HMAC-SHA256;
- SecretId: SecretId in the key pair;
- CredentialScope: credential scope. See above for more information;
- SignedHeaders: header information for signature. See above for more information;
- Signature: signature value

Based on the above rules, the value in the example is:

```
TC3-HMAC-SHA256 Credential=AKIDEXAMPLE/Date/service/tc3_request, SignedHeaders=content-type;host, Signature=5da7a33f6993f0614b047e5df4582db9e9bf4672ba50567dba16c6ccf174c474
```
The complete calling is as follows:

```
https://cvm.tencentcloudapi.com/?Limit=10&Offset=0
```

Authorization: TC3-HMAC-SHA256 Credential=AKIDz8krbsJ5yKBZQpn74WFkmLPx3EXAMPLE/2018-10-09/cvm/tc3_request, SignedHeaders=content-type;host, Signature=5da7a33f6993f0614b047e5df4582db9e9bf4672ba50567dba16c6ccf174c474

Content-Type: application/x-www-form-urlencoded
Host: cvm.tencentcloudapi.com
X-TC-Action: DescribeInstances
X-TC-Version: 2017-03-12
X-TC-Timestamp: 1539084154
X-TC-Region: ap-guangzhou

5. Signature demonstration

Java

```java
import java.io.BufferedReader;
import java.io.InputStream;
import java.io.InputStreamReader;
import java.net.URL;
import java.text.SimpleDateFormat;
import java.util.Date;
import java.util.Map;
import java.util.TimeZone;
import java.util.TreeMap;
import javax.crypto.Mac;
import javax.crypto.spec.SecretKeySpec;
import javax.net.ssl.HttpsURLConnection;
import javax.xml.bind.DatatypeConverter;
import org.apache.commons.codec.digest.DigestUtils;

public class TencentCloudAPITC3Demo {
    private final static String CHARSET = "UTF-8";
    private final static String ENDPOINT = "cvm.tencentcloudapi.com";
    private final static String PATH = "/";
    private final static String SECRET_ID = "AKIDz8krbsJ5yKBZQpn74WFkmLPx3EXAMPLE";
    private final static String SECRET_KEY = "Gu5t9xGARNpq86cd98joQYCN3EXAMPLE";
    private final static String CT_X_WWW_FORM_URLENCODED = "application/x-www-form-urlencoded";
    private final static String CT_JSON = "application/json";
    private final static String CT_FORM_DATA = "multipart/form-data";

    public static byte[] sign256(byte[] key, String msg) throws Exception {
        Mac mac = Mac.getInstance("HmacSHA256");
        SecretKeySpec secretKeySpec = new SecretKeySpec(key, mac.getAlgorithm());
        mac.init(secretKeySpec);
        return mac.doFinal(msg.getBytes(CHARSET));
    }

    public static void main(String[] args) throws Exception {
        String service = "cvm";
        String host = "cvm.tencentcloudapi.com";
        String region = "ap-guangzhou";
    }
}
```
String action = "DescribeInstances";
String version = "2017-03-12";
String algorithm = "TC3-HMAC-SHA256";
String timestamp = "1539084154";
//String timestamp = String.valueOf(System.currentTimeMillis() / 1000);
SimpleDateFormat sdf = new SimpleDateFormat("yyyy-MM-dd");
//Mind the time zone. Otherwise an error may occur.
sdf.setTimeZone(TimeZone.getTimeZone("UTC"));
String date = sdf.format(new Date(Long.valueOf(timestamp + "000")));

// ************* Step 1: Splice the specification request string*************
String httpRequestMethod = "GET";
String canonicalUri = "/";
String canonicalQueryString = "Limit=10&Offset=0";
String canonicalHeaders = "content-type:application/x-www-form-urlencoded\n" + "host:" + host + ";\n";
String signedHeaders = "content-type;host";
String hashedRequestPayload = DigestUtils.sha256Hex("");
String canonicalRequest = httpRequestMethod + 
"/" + canonicalUri + 
"?" + canonicalQueryString + 
"\n" + canonicalHeaders + 
"\n" + signedHeaders + 
"\n" + hashedRequestPayload;
System.out.println(canonicalRequest);

// ************* Step 2: Splice the string to be signed*************
String credentialScope = date + "/" + service + "/" + "tc3_request";
String hashedCanonicalRequest = DigestUtils.sha256Hex(canonicalRequest.getBytes(CHARSET));
String stringToSign = algorithm + 
"\n" + timestamp + 
"\n" + credentialScope + 
"\n" + hashedCanonicalRequest;
System.out.println(stringToSign);

// ************* Step 3: Compute signature*************
byte[] secretDate = sign256("TC3" + SECRET_KEY).getBytes(CHARSET);
byte[] secretService = sign256(secretDate, service);
byte[] secretSigning = sign256(secretService, "tc3_request");
String signature = DatatypeConverter.printHexBinary(sign256(secretSigning, stringToSign)).toLowerCase();
System.out.println(signature);

// ************* Step 4: Splice Authorization *************
String authorization = algorithm + 
"\n" + "Credential=" + SECRET_ID + 
"\n" + signedHeaders + 
"\n" + "Signature=" + signature;
System.out.println(authorization);

TreeMap<String, String> headers = new TreeMap<String, String>();
headers.put("Authorization", authorization);
headers.put("Host", host);
headers.put("Content-Type", CT_X_WWW_FORM_URLENCODED);
headers.put("X-TC-Action", action);
headers.put("X-TC-Timestamp", timestamp);
headers.put("X-TC-Version", version);
headers.put("X-TC-Region", region);

Python

# -*- coding: utf-8 -*-
import hashlib, hmac, json, os, sys, time
from datetime import import datetime
# Key parameter
secret_id = "AKIDz8krbsJ5yKBZQpn74WFkmlPxl3EXAMplE"
secret_key = "Gu5z9xGARNpql8cd98joQYCN3EXAMplE"

service = "cvm"
host = "cvm.tencentcloudapi.com"
endpoint = "https://" + host
region = "ap-guangzhou"
action = "DescribeInstances"
version = "2017-03-12"
algorithm = "TC3-HMAC-SHA256"
timestamp = 1539084154
date = datetime.utcfromtimestamp(timestamp).strftime("%Y-%m-%d")
params = {"Limit": 10, "Offset": 0}

# ************* Step 1: Splice the specification request string*************
http_request_method = "GET"
canonical_uri = "/"
canonical_querystring = "Limit=10&Offset=0"
ct = "x-www-form-urlencoded"
payload = ""
if http_request_method == "POST":
canonical_querystring = ""
canonical_headers = "content-type:application/%s\nhost:%s\n" % (ct, host)
signed_headers = "content-type;host"
hashed_request_payload = hashlib.sha256(payload.encode("utf-8")).hexdigest()
canonical_request = (http_request_method + "\n" +
canonical_uri + "\n" +
canonical_querystring + "\n" +
canonical_headers + "\n" +
signed_headers + "\n" +
hashed_request_payload)
print(canonical_request)

# ************* Step 2: Splice the string to be signed*************
credential_scope = date + "/" + service + "/" + "tc3_request"
hashed_canonical_request = hashlib.sha256(canonical_request.encode("utf-8")).hexdigest()
string_to_sign = (algorithm + "\n" +
str(timestamp) + "\n" +
credential_scope + "\n" +
hashed_canonical_request)
print(string_to_sign)

# ************* Step 3: Compute signature*************
# Function for computing signature digest
def sign(key, msg):
    return hmac.new(key, msg.encode("utf-8"), hashlib.sha256).digest()

secret_date = sign("TC3" + secret_key.encode("utf-8"), date)
secret_service = sign(secret_date, service)
secret_signing = sign(secret_service, "tc3_request")
signature = hmac.new(secret_signing, string_to_sign.encode("utf-8"), hashlib.sha256).hexdigest()
print(signature)
# ************* Step 4: Splice Authorization *************
authorization = (algorithm + " " + "Credential=" + secret_id + "/" + credential_scope + ", " + "SignedHeaders=" + signed_headers + ", " + "Signature=" + signature)
print(authorization)

# Common parameters are added to the request string.
headers = {
    "Authorization": authorization,
    "Host": host,
    "Content-Type": "application/%s" % ct,
    "X-TC-Action": action,
    "X-TC-Timestamp": str(timestamp),
    "X-TC-Version": version,
    "X-TC-Region": region,
}

## Signature Failure

The following signature error codes may be returned depending on the actual situation.

<table>
<thead>
<tr>
<th>Error Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AuthFailure.SignatureExpire</td>
<td>Signature expired</td>
</tr>
<tr>
<td>AuthFailure.SecretIdNotFound</td>
<td>Key does not exist</td>
</tr>
<tr>
<td>AuthFailure.SignatureFailure</td>
<td>Invalid signature</td>
</tr>
<tr>
<td>AuthFailure.TokenFailure</td>
<td>Invalid token</td>
</tr>
<tr>
<td>AuthFailure.InvalidSecretId</td>
<td>Invalid key (it is not a cloud API key)</td>
</tr>
</tbody>
</table>
Tencent Cloud API authenticates each access request, so each request is required to include the Signature in the common request parameters for user identity authentication. The signature is generated with user’s security credentials, which consist of a SecretId and a SecretKey. If you don’t have security credentials, apply for the credentials on the Cloud API Key page. Otherwise, you will not be able to call the cloud APIs.

1. Apply for Security Credentials

Before using cloud APIs for the first time, you need to apply for security credentials on the Cloud API Key page. Security credentials consist of a SecretId and a SecretKey:

- The SecretId: Identify of the API requester.
- The SecretKey: A key that can be used to encrypt the strings to create a signature so that Tencent Cloud server can validate the identity of the requester.
- The security credentials must be kept confidential to avoid leakage.

Apply for security credentials by following the steps below:

1. Log in to the Tencent Cloud Console.
2. Go to the Cloud API Key console page.
3. On the Cloud API Key page, click Create to create a pair of SecretId/SecretKey.

Note: A developer account can have up to two pairs of SecretId/SecretKey.

2. Generate Signature String

With the SecretId and SecretKey, a signature string can be generated. The following describes how to generate a signature string:

Suppose that you have the following SecretId and SecretKey:

- SecretId: AKIDz8krbsj5yKBZQpn74WFkmLPx3EXAMPLE
- SecretKey: Gu5t9xGARNpq86cd98joQYCN3EXAMPLE

Note: This is only for demonstration purpose. Make sure you proceed with your actual SecretId and SecretKey.

For example, if you call the API "View CVM Instance List" (DescribeInstances), the possible request parameters are as follows:

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Description</th>
<th>Parameter Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Action</td>
<td>Method name</td>
<td>DescribeInstances</td>
</tr>
<tr>
<td>SecretId</td>
<td>Key ID</td>
<td>AKIDz8krbsj5yKBZQpn74WFkmLPx3EXAMPLE</td>
</tr>
<tr>
<td>Timestamp</td>
<td>Current timestamp</td>
<td>1465185768</td>
</tr>
<tr>
<td>Nonce</td>
<td>A random positive integer</td>
<td>11886</td>
</tr>
<tr>
<td>Region</td>
<td>The region where the instance resides</td>
<td>ap-guangzhou</td>
</tr>
</tbody>
</table>
### Parameter Table

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Description</th>
<th>Parameter Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>InstanceIds.0</td>
<td>ID of the instance to be queried</td>
<td>ins-09dx96dg</td>
</tr>
<tr>
<td>Offset</td>
<td>Offset value</td>
<td>0</td>
</tr>
<tr>
<td>Limit</td>
<td>Maximum number of output results</td>
<td>20</td>
</tr>
<tr>
<td>Version</td>
<td>API version</td>
<td>2017-03-12</td>
</tr>
</tbody>
</table>

### 2.1. Sort parameters

First, sort all the request parameters in an ascending lexicographical order (ASCII code) by their names. Notes: (1) Parameters are sorted by their names instead of their values; (2) The parameters are sorted based on ASCII code, not in an alphabetical order or by values. For example, InstanceIds.2 should be arranged after InstanceIds.12. You can complete the sorting process using a sorting function in a programming language, such as the ksort function in PHP. The parameters in the example are sorted as follows:

```json
{
    'Action': 'DescribeInstances',
    'InstanceIds.0': 'ins-09dx96dg',
    'Limit': 20,
    'Nonce': 11886,
    'Offset': 0,
    'Region': 'ap-guangzhou',
    'SecretId': 'AKIDz8krbsJSyKBZQpn74WFkmLPx3EXAMPLE',
    'Timestamp': 1465185768,
    'Version': '2017-03-12',
}
```

Any other programming language can be used to sort these parameters as long as the same result is produced.

### 2.2. Generate a request string

This step is to generate the request string. Format the request parameters sorted in the previous step as "parameter name"="parameter value". For example, if the parameter value of "Action" is "DescribeInstances", the resulting format is Action=DescribeInstances. **Note:** "Parameter value" is the original value rather than the URL encoded value.

Then, join the formatted parameters together with ";" to generate the final request string:

```
Action=DescribeInstances&InstanceIds.0=ins-09dx96dg&Limit=20&Nonce=11886&Offset=0&Region=ap-guangzhou&SecretId=AKIDz8krbsJSyKBZQpn74WFkmLPx3EXAMPLE&Timestamp=1465185768&Version=2017-03-12
```

### 2.3. Generate the original signature string

This step is to generate the original signature string. The original signature string is composed of the following parameters:

1. Request method: The POST and GET methods are supported. In this case, a GET request is used. Please note that the methods must be in upper-case.
2. Request host: The request domain name for the API "View Instance List" (DescribeInstances) is cvm.tencentcloudapi.com. The actual request domain name varies with the module to which the API belongs. For more information, see the relevant API description.
3. Request path: The request path for the current version of cloud API is always "/".
4. Request string: The request string generated in the previous step.
The original signature string is constructed as follows: Request Method + Request Host + Request Path + ? + Request String.

The resulting string is:

```
GETcvm.tencentcloudapi.com/?Action=DescribeInstances&InstanceId.0=ins-09dx96dg&Limit=20&Nonce=11886&Offset=0&Region=ap-guangzhou&SecretId=AKIDz8krbsJ5yKBZQpn74WFkmlPp3EXAMPLE&Timestamp=1465185768&Version=2017-03-12
```

### 2.4. Generate a signature string

This step is to generate a signature string. Sign the original signature string obtained in the previous step using HMAC-SHA1 algorithm, and then encode the signature string using Base64 to obtain the final signature string.

For example, the code is as follows if written in PHP:

```php
$secretKey = 'Gu5t9xGARNpq86cd98joQYCN3EXAMPLE';
$srcStr = 'GETcvm.tencentcloudapi.com/?Action=DescribeInstances&InstanceId.0=ins-09dx96dg&Limit=20&Nonce=11886&Offset=0&Region=ap-guangzhou&SecretId=AKIDz8krbsJ5yKBZQpn74WFkmlPp3EXAMPLE&Timestamp=1465185768&Version=2017-03-12';
$signStr = base64_encode(hash_hmac('sha1', $srcStr, $secretKey, true));
echo $signStr;
```

The resulting signature string is as follows:

```
EliP9YW3pW28FpsEdkXt/+WcGeI=
```

When you’re using any other programming language, you can use the original signature string in the above example for signature verification, as long as the resulting signature string is same as the one in the example.

### 3. Encode the Signature String

The generated signature string cannot be directly used as the request parameter, and needs to be URL encoded.

For example, the signature string "EliP9YW3pW28FpsEdkXt/+WcGeI=" generated in the previous step is converted to the final signature string request parameter (Signature): EliP9YW3pW28FpsEdkXt/+WcGeI=, which will be used to generate the final request URL.

**Note:** If GET method is used, or if POST method is used and Content-Type is application/x-www-form-urlencoded, all request parameters need to be URL encoded. Encoding is not required for parameter keys and equal sign ("="). Non-ASCII characters should be encoded with UTF-8 before they can be URL encoded.

**Note:** For some programming languages, their HTTP libraries can encode URLs automatically for all parameters. In this case, URL encoding is not required for the signature string, because repeated URL encoding will cause signature failure.

**Note:** Other parameters need to be encoded using RFC 3986. For special characters such as Chinese characters, %XY is used to do percentage encoding, in which "X" and "Y" are hexadecimal characters (0-9 and A-F). Lower cases will cause an error.

### 4. Signature Failure

The following signature error codes may be returned depending on the actual situation.

<table>
<thead>
<tr>
<th>Error Code</th>
<th>Description</th>
</tr>
</thead>
</table>

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</tr>
<tr>
<td>AuthFailure.SecretIdNotFound</td>
<td>Key does not exist</td>
</tr>
<tr>
<td>AuthFailure.SignatureFailure</td>
<td>Invalid signature</td>
</tr>
<tr>
<td>AuthFailure.TokenFailure</td>
<td>Invalid token</td>
</tr>
<tr>
<td>AuthFailure.InvalidSecretId</td>
<td>Invalid key (it is not a cloud API key)</td>
</tr>
</tbody>
</table>

5. Signature Demonstration

When calling the API 3.0, you’re recommended to use the supplied Tencent Cloud SDK 3.0, which encapsulates the signature process to allow you to focus on the APIs provided by the product during development. For more information, see [SDK Center](#). The following programming languages are supported:

- Python
- Java
- PHP
- Go
- JavaScript
- .NET

The following examples show how the above signature process is implemented in various programming languages. The request domain name, APIs and parameter values to be used are same as the ones in the above signature process. The code below is only for demonstration purpose. Please use the SDK in your actual development.

The resulting URL may be: `https://cvm.tencentcloudapi.com/?Action=DescribeInstances&InstanceIds.0=ins-09dx96dg&Limit=20&Nonce=11886&Offset=0&Region=ap-guangzhou&SecretId=AKIDz8krbsJ5yKBZQpn74WFxmlPlx3EXAMPLE&Signature=EliP9YW3pW28FpsEdkXt/+WcGel=&Timestamp=1465185768&Version=2017-03-12`

Note: Since the key used in the examples is fictitious and the timestamp is not the current system time, the authentication error "The signature expired" will be returned when you open this URL in a browser or call it with a command such as curl. To allow the URL to be returned normally, replace the SecretId and SecretKey in the examples with the real keys, and use the current system timestamp as the Timestamp.

Note: In the following examples, the order in which the parameters are arranged in the resulting URL may vary with different programming languages, even with each execution of the code in the same programming language. But this does not affect the correctness of the URL, provided that all parameters are included and the resulting signature is correct.

Note: The following code only applies to API 3.0 and cannot be directly used in other signature processes. Even in the earlier versions of API, the differences in specifics between versions may lead to signature computing error. For more information, see the relevant documentation.

Java

```java
import java.io.UnsupportedEncodingException;
import java.net.URLEncoder;
import java.util.Random;
```
import java.util.TreeMap;
import javax.crypto.Mac;
import javax.crypto.spec.SecretKeySpec;
import javax.xml.bind.DatatypeConverter;

public class TencentCloudAPIDemo {
    private final static String CHARSET = "UTF-8";

    public static String sign(String s, String key, String method) throws Exception {
        Mac mac = Mac.getInstance(method);
        SecretKeySpec secretKeySpec = new SecretKeySpec(key.getBytes(CHARSET), mac.getAlgorithm());
        mac.init(secretKeySpec);
        byte[] hash = mac.doFinal(s.getBytes(CHARSET));
        return DatatypeConverter.printBase64Binary(hash);
    }

    public static String getStringToSign(TreeMap<String, Object> params) {
        StringBuilder s2s = new StringBuilder("GETcvm.tencentcloudapi.com/?");
        // The parameters are required to be sorted in lexicographic order during the generation of signature, and TreeMap is used here to implement the sorting.
        for (String k : params.keySet()) {
            s2s.append(k).append("=").append(params.get(k).toString()).append("&");
        }
        return s2s.toString().substring(0, s2s.length() - 1);
    }

    public static String getUrl(TreeMap<String, Object> params) throws UnsupportedEncodingException {
        StringBuilder url = new StringBuilder("https://cvm.tencentcloudapi.com/?");
        // There is no requirement for the order of parameters in the actual request URL.
        for (String k : params.keySet()) {
            url.append(k).append("=").append(URLEncoder.encode(params.get(k).toString(), CHARSET)).append("&");
        }
        return url.toString().substring(0, url.length() - 1);
    }

    public static void main(String[] args) throws Exception {
        TreeMap<String, Object> params = new TreeMap<String, Object>(); // TreeMap is used for auto-sorting.
        // A random number should be used in the actual request, for example: params.put("Nonce", new Random().nextInt(java.lang.Integer.MAX_VALUE));
        params.put("Nonce", 11886); // Common parameters
        // The current system time should be used in the actual request, for example: params.put("Timestamp", System.currentTimeMillis() / 1000);
        params.put("Nonce", 11886); // Common parameters
        params.put("Timestamp", 1465185768); // Common parameters
        params.put("SecretId", "AKIDz8krbsJ5yKBZQqn74WFkmLPx3EXAMPLE"); // Common parameters
        params.put("Action", "DescribeInstances"); // Common parameters
        params.put("Version", "2017-03-12"); // Common parameters
        params.put("Region", "ap-guangzhou"); // Common parameters
        params.put("Limit", 20); // Service parameter
        params.put("Offset", 0); // Service parameter
        params.put("InstanceIds.0", "ins-09dx96dg"); // Service parameter
        params.put("Signature", sign(getStringToSign(params), "Gu5t9xGARNpqq86cd98joQYCN3EXAMPLE", "HmacSHA1")); // Common parameters
        System.out.println(getUrl(params));
    }
}
Python

Note: Before you can run the code in a Python 2 environment, install the requests dependency package `pip install requests`.

```python
# -*- coding: utf-8 -*-
import base64
import hashlib
import hmac
import time
import requests

secret_id = "AKIDz8krbsJ5yKBZQpn74WFkmlLPx3EXAMPLE"
secret_key = "Gu5t9xGARNpq86cd98joQYCN3EXAMPLE"

def get_string_to_sign(method, endpoint, params):
    s = method + endpoint + "/?"
    query_str = ";".join("%s=%s" % (k, params[k]) for k in sorted(params))
    return s + query_str

def sign_str(key, s, method):
    hmac_str = hmac.new(key.encode("utf8"), s.encode("utf8"), method).digest()
    return base64.b64encode(hmac_str)

if __name__ == '__main__':
    endpoint = "cvm.tencentcloudapi.com"
    data = {
        'Action' : 'DescribeInstances',
        'InstanceIds.0' : 'ins-09dx96dg',
        'Limit' : 20,
        'Nonce' : 11886,
        'Offset' : 0,
        'Region' : 'ap-guangzhou',
        'SecretId' : secret_id,
        'Timestamp' : 1465185768, # int(time.time())
        'Version': '2017-03-12'
    }
    s = get_string_to_sign("GET", endpoint, data)
    data["Signature"] = sign_str(secret_key, s, hashlib.sha1)
    print(data["Signature"])
    # The API will be called actually, and a fee may be incurred if the call is successful.
    # resp = requests.get("https://" + endpoint, params=data)
    # print(resp.url)
```
Successful Response

Take the CVM API "View Instance Status List" (DescribeInstancesStatus) (version 2017-03-12) as an example. If the call of this API is successful, the response is as follows:

```json
{
  "Response": {
    "TotalCount": 0,
    "InstanceStatusSet": [],
    "RequestId": "b5b41468-520d-4192-b42f-595cc34b6c1c"
  }
}
```

- Response and its RequestId are common fields and are always returned as long as the API request is processed, regardless of whether it is successful.
- RequestId is used to uniquely identify an API request. If an API exception occurs, you can contact us and provide this ID to solve the problem.
- Any fields other than the common fields are API-specific fields. For more information on such fields, see the relevant API documentation. In this example, TotalCount and InstanceStatusSet are specific to the API DescribeInstancesStatus. Since the user who initiated the request does not have a CVM instance yet, 0 is returned for TotalCount and InstanceStatusSet is left empty.

Error Response

If the request fails, the response is as follows:

```json
{
  "Response": {
    "Error": {
      "Code": "AuthFailure.SignatureFailure",
      "Message": "The provided credentials could not be validated. Please check your signature is correct."
    },
    "RequestId": "ed93f3cb-f35e-473f-b9f3-0d451b8b79c6"
  }
}
```

- In case of a failed request, Error, Code and Message fields are returned.
- Code indicates the error code. When an error occurs with the request, you can use the error code to find the cause and solution for the error in the list of common error codes or API-specific error codes.
- Message indicates the cause for the error. It may be updated from time to time.
- RequestId is used to uniquely identify an API request. If an API exception occurs, you can contact us and provide this ID to solve the problem.

Common Error Codes
The Error field in the response indicates a failed API request, and the Code field indicates the error code. The following common error codes apply to all requests.

<table>
<thead>
<tr>
<th>Error Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AuthFailure.InvalidSecretId</td>
<td>Invalid key (it is not a cloud API key)</td>
</tr>
<tr>
<td>AuthFailure.MFAFailure</td>
<td>MFA failure</td>
</tr>
<tr>
<td>AuthFailure.SecretIdNotFound</td>
<td>Key does not exist.</td>
</tr>
<tr>
<td>AuthFailure.SignatureExpire</td>
<td>Signature expired</td>
</tr>
<tr>
<td>AuthFailure.SignatureFailure</td>
<td>Invalid signature</td>
</tr>
<tr>
<td>AuthFailure.TokenFailure</td>
<td>Invalid token</td>
</tr>
<tr>
<td>AuthFailure.UnauthorizedOperation</td>
<td>No CAM authorization</td>
</tr>
<tr>
<td>DryRunOperation</td>
<td>DryRun operation. It means that the request is successful, except that the DryRun parameter is passed additionally.</td>
</tr>
<tr>
<td>FailedOperation</td>
<td>Operation failed</td>
</tr>
<tr>
<td>InternalError</td>
<td>Internal error.</td>
</tr>
<tr>
<td>InvalidAction</td>
<td>API does not exist.</td>
</tr>
<tr>
<td>InvalidParameter</td>
<td>Incorrect parameter</td>
</tr>
<tr>
<td>InvalidParameterValue</td>
<td>Invalid parameter value</td>
</tr>
<tr>
<td>LimitExceeded</td>
<td>Quota limit is exceeded.</td>
</tr>
<tr>
<td>MissingParameter</td>
<td>A parameter is missing.</td>
</tr>
<tr>
<td>NoSuchVersion</td>
<td>The API version does not exist.</td>
</tr>
<tr>
<td>RequestLimitExceeded</td>
<td>The request rate limit is exceeded.</td>
</tr>
<tr>
<td>ResourceInUse</td>
<td>Resource is occupied.</td>
</tr>
<tr>
<td>ResourceInsufficient</td>
<td>Insufficient resource</td>
</tr>
<tr>
<td>ResourceNotFound</td>
<td>Resource does not exist.</td>
</tr>
<tr>
<td>ResourceUnavailable</td>
<td>Resource is unavailable.</td>
</tr>
<tr>
<td>UnauthorizedOperation</td>
<td>Unauthorized operation</td>
</tr>
<tr>
<td>UnknownParameter</td>
<td>Unknown parameter</td>
</tr>
<tr>
<td>UnsupportedOperation</td>
<td>Unsupported operation</td>
</tr>
<tr>
<td>UnsupportedProtocol</td>
<td>Unsupported HTTP(S) request protocol. Only GET and POST requests are supported.</td>
</tr>
<tr>
<td>UnsupportedRegion</td>
<td>Unsupported region</td>
</tr>
</tbody>
</table>
Instance-Related APIs
CreateDBInstance

Last updated: 2019-09-09 15:18:02

1. API Description

Domain name for API request: mongodb.tencentcloudapi.com.

This API (CreateDBInstance) is used to create a monthly subscription MongoDB database instance.

Default request rate limit: 20/sec.

Note: This API supports Finance regions. Finance and non-Finance regions are isolated from each other. Therefore, if the common parameter Region is a Finance region (such as ap-shanghai-fsi), you need to specify a domain name containing the Finance region specified in the Region field, for example: mongodb.ap-shanghai-fsi.tencentcloudapi.com.

2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see Common Request Parameters.

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Required</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Action</td>
<td>Yes</td>
<td>String</td>
<td>Common parameter. The value used for this API: CreateDBInstance.</td>
</tr>
<tr>
<td>Version</td>
<td>Yes</td>
<td>String</td>
<td>Common parameter. The value used for this API: 2018-04-08</td>
</tr>
<tr>
<td>Region</td>
<td>Yes</td>
<td>String</td>
<td>Common parameter. For more information, see the list of regions supported by the product.</td>
</tr>
<tr>
<td>SecondaryNum</td>
<td>Yes</td>
<td>Integer</td>
<td>Number of slave nodes per replica set</td>
</tr>
<tr>
<td>Memory</td>
<td>Yes</td>
<td>Integer</td>
<td>Memory capacity of the instance (in GB)</td>
</tr>
<tr>
<td>Volume</td>
<td>Yes</td>
<td>Integer</td>
<td>Disk capacity of the instance (in GB)</td>
</tr>
<tr>
<td>MongoVersion</td>
<td>Yes</td>
<td>String</td>
<td>Version number. Only MONGO_3_WT is supported.</td>
</tr>
<tr>
<td>GoodsNum</td>
<td>Yes</td>
<td>Integer</td>
<td>Number of instances. The default value is 1, minimum is 1, and maximum is 10.</td>
</tr>
<tr>
<td>Zone</td>
<td>Yes</td>
<td>String</td>
<td>Name of the region to which the instance belongs, e.g. ap-guangzhou-2.</td>
</tr>
<tr>
<td>TimeSpan</td>
<td>Yes</td>
<td>Integer</td>
<td>Purchased usage period (in month)</td>
</tr>
<tr>
<td>Password</td>
<td>Yes</td>
<td>String</td>
<td>Instance password</td>
</tr>
<tr>
<td>ProjectId</td>
<td>No</td>
<td>Integer</td>
<td>Project ID. If this is left empty, default project is used.</td>
</tr>
<tr>
<td>Parameter Name</td>
<td>Required</td>
<td>Type</td>
<td>Description</td>
</tr>
<tr>
<td>------------------</td>
<td>----------</td>
<td>---------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>SecurityGroup.N</td>
<td>No</td>
<td>Array of String</td>
<td>Security group parameters</td>
</tr>
<tr>
<td>UniqVpcId</td>
<td>No</td>
<td>String</td>
<td>VPC ID. If it is left empty, the basic network is used by default.</td>
</tr>
<tr>
<td>UniqSubnetId</td>
<td>No</td>
<td>String</td>
<td>Subnet ID under VPC. If VpcId is set, SubnetId is required.</td>
</tr>
</tbody>
</table>

3. Output Parameters

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DealId</td>
<td>String</td>
<td>Order ID</td>
</tr>
<tr>
<td>RequestId</td>
<td>String</td>
<td>The unique ID of a request, which is required for each troubleshooting case.</td>
</tr>
</tbody>
</table>

4. Example

**Example 1 Create a monthly subscription database instance**

You need to create a monthly subscription database instance using an API.

**Input example**

```plaintext
https://mongodb.tencentcloudapi.com/?Action=CreateDBInstance
&Memory=4
&Volume=250
&GoodsNum=1
&Zone=ap-guangzhou-2
&UniqVpcId=vpc-0akbol5v
&UniqSubnetId=subnet-fyrtjbqw
&ProjectId=0
&MongoVersion=MONGO_3_WT
&MachineCode=TGIO
&SecondaryNum=2
&TimeSpan=1
&Password=pwd123456
&<Common request parameters>
```

**Output example**

```json
{
    "Response": {
        "RequestId": "be8f4a30-ea2e-4623-8b6b-0ccce04cd9f7",
        "DealId": "19297475"
    }
}
```
5. Resources for Developers

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- Tencent Cloud SDK 3.0 for .NET

**Command line tools**

- Tencent Cloud CLI 3.0

6. Error Codes

The following only lists the error codes related to this API. For other error codes, see Common Error Codes.

<table>
<thead>
<tr>
<th>Error Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>InvalidParameter</td>
<td>Invalid parameter</td>
</tr>
</tbody>
</table>

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CreateDBInstanceHour

1. API Description

Domain name for API request: mongodb.tencentcloudapi.com.

This API (CreateDBInstanceHour) is used to create pay-as-you-go MongoDB database instances (including master instances, disaster recovery instances and read-only instances) by passing such information as instance specification, instance type, MongoDB version, purchased usage period and quantity.

Default request rate limit: 20/sec.

Note: This API supports Finance regions. Finance and non-Finance regions are isolated from each other. Therefore, if the common parameter Region is a Finance region (such as ap-shanghai-fsi), you need to specify a domain name containing the Finance region specified in the Region field, for example: mongodb.ap-shanghai-fsi.tencentcloudapi.com.

2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see Common Request Parameters.

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Required</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Action</td>
<td>Yes</td>
<td>String</td>
<td>Common parameter. The value used for this API: CreateDBInstanceHour.</td>
</tr>
<tr>
<td>Version</td>
<td>Yes</td>
<td>String</td>
<td>Common parameter. The value used for this API: 2018-04-08</td>
</tr>
<tr>
<td>Region</td>
<td>Yes</td>
<td>String</td>
<td>Common parameter. For more information, see the list of regions supported by the product.</td>
</tr>
<tr>
<td>Memory</td>
<td>Yes</td>
<td>Integer</td>
<td>Memory capacity of the instance (in GB)</td>
</tr>
<tr>
<td>Volume</td>
<td>Yes</td>
<td>Integer</td>
<td>Disk capacity of the instance (in GB)</td>
</tr>
<tr>
<td>ReplicateSetNum</td>
<td>Yes</td>
<td>Integer</td>
<td>Number of replica sets. The value of 1 refers to a single replica set instance. A value greater than 1 refers to a sharding cluster instance. The value shall not be greater than 10.</td>
</tr>
<tr>
<td>SecondaryNum</td>
<td>Yes</td>
<td>Integer</td>
<td>Number of slave nodes per replica set. Only 2 is supported now.</td>
</tr>
<tr>
<td>EngineVersion</td>
<td>Yes</td>
<td>String</td>
<td>MongoDB engine version. Supported values include: MONGO_2, MONGO_3_MMAP, MONGO_3_WT, MONGO_3_ROCKS, and MONGO_36_WT.</td>
</tr>
<tr>
<td>Machine</td>
<td>Yes</td>
<td>String</td>
<td>Instance type. GIO: High IO; TGIO: High IO (10 GB).</td>
</tr>
<tr>
<td>GoodsNum</td>
<td>Yes</td>
<td>Integer</td>
<td>Number of instances. The default value is 1, minimum is 1, and maximum is 10.</td>
</tr>
<tr>
<td>Zone</td>
<td>Yes</td>
<td>String</td>
<td>Availability zone information, such as ap-guangzhou-2.</td>
</tr>
<tr>
<td>InstanceRole</td>
<td>Yes</td>
<td>String</td>
<td>Instance role. Supported values include: MASTER - Master instance; DR - Disaster recovery instance; RO - Read-only instance.</td>
</tr>
</tbody>
</table>
### 3. Output Parameters

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DealId</td>
<td>String</td>
<td>Order ID</td>
</tr>
<tr>
<td>RequestId</td>
<td>String</td>
<td>The unique ID of a request, which is required for each troubleshooting case.</td>
</tr>
</tbody>
</table>

### 4. Example

**Example 1 Create a database instance (pay-as-you-go)**

You need to create a pay-as-you-go database instance using an API.

**Input example**

```bash
https://mongodb.tencentcloudapi.com/?Action=CreateDBInstanceHour
&Memory=4
&Volume=250
&ReplicateSetNum=1
&SecondaryNum=2
&EngineVersion=MONGO_3_WT
&Machine=TGIO
&GoodsNum=1
&Zone=ap-guangzhou-3
&InstanceRole=MASTER
&InstanceType=REPLSET
&<Common request parameters>
```

**Output example**

```json
{
  "Response": {
    "RequestId": "d3aece52-5abf-49e4-bf79-1a6c47a406d4",
    "DealId": "28920"
  }
}
```
5. Resources for Developers

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- Tencent Cloud SDK 3.0 for .NET

Command line tools

- Tencent Cloud CLI 3.0

6. Error Codes
There is no error code related to the API business logic. For other error codes, see Common Error Codes.
**TerminateDBInstance**

Last updated: 2019-09-09 15:18:01

1. API Description

Domain name for API request: mongodb.tencentcloudapi.com.

This API (TerminateDBInstance) is used to terminate a pay-as-you-go MongoDB database instance.

Default request rate limit: 20/sec.

Note: This API supports Finance regions. Finance and non-Finance regions are isolated from each other. Therefore, if the common parameter Region is a Finance region (such as ap-shanghai-fsi), you need to specify a domain name containing the Finance region specified in the Region field, for example: mongodb.ap-shanghai-fsi.tencentcloudapi.com.

2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see Common Request Parameters.

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Required</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Action</td>
<td>Yes</td>
<td>String</td>
<td>Common parameter. The value used for this API: TerminateDBInstance.</td>
</tr>
<tr>
<td>Version</td>
<td>Yes</td>
<td>String</td>
<td>Common parameter. The value used for this API: 2018-04-08</td>
</tr>
<tr>
<td>Region</td>
<td>Yes</td>
<td>String</td>
<td>Common parameter. For more information, see the list of regions supported by the product.</td>
</tr>
<tr>
<td>InstanceId</td>
<td>Yes</td>
<td>String</td>
<td>Instance ID, such as: cmgo-p8vnipr5.</td>
</tr>
</tbody>
</table>

3. Output Parameters

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AsyncRequestId</td>
<td>String</td>
<td>Order ID, indicating instance termination is successful</td>
</tr>
<tr>
<td>RequestId</td>
<td>String</td>
<td>The unique ID of a request, which is required for each troubleshooting case.</td>
</tr>
</tbody>
</table>

4. Example

**Example 1 Terminate a pay-as-you-go database instance**

Input example

https://mongodb.tencentcloudapi.com/?Action=TerminateDBInstance
&InstanceId=cmgo-f555zzzz
5. Resources for Developers

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- Tencent Cloud SDK 3.0 for NodeJS
- Tencent Cloud SDK 3.0 for .NET

Command line tools

- Tencent Cloud CLI 3.0

6. Error Codes

The following only lists the error codes related to this API. For other error codes, see Common Error Codes.

<table>
<thead>
<tr>
<th>Error Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>InternalError.AsyncRequestError</td>
<td>An error occurred while querying an async task.</td>
</tr>
<tr>
<td>InvalidParameter</td>
<td>Invalid parameter</td>
</tr>
</tbody>
</table>
UpgradeDBInstance

Last updated: 2019-09-09 15:18:01

1. API Description

Domain name for API request: mongodb.tencentcloudapi.com.

This API (UpgradeDBInstance) is used to upgrade a monthly subscription MongoDB database instance to expand memory, storage and Oplog capacity.

Default request rate limit: 20/sec.

Note: This API supports Finance regions. Finance and non-Finance regions are isolated from each other. Therefore, if the common parameter Region is a Finance region (such as ap-shanghai-fsi), you need to specify a domain name containing the Finance region specified in the Region field, for example: mongodb.ap-shanghai-fsi.tencentcloudapi.com.

2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see Common Request Parameters.

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Required</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Action</td>
<td>Yes</td>
<td>String</td>
<td>Common parameter. The value used for this API: UpgradeDBInstance.</td>
</tr>
<tr>
<td>Version</td>
<td>Yes</td>
<td>String</td>
<td>Common parameter. The value used for this API: 2018-04-08</td>
</tr>
<tr>
<td>Region</td>
<td>Yes</td>
<td>String</td>
<td>Common parameter. For more information, see the list of regions supported by the product.</td>
</tr>
<tr>
<td>InstanceId</td>
<td>Yes</td>
<td>String</td>
<td>Instance ID, such as cmgo-p8vnipr5. It is identical to the instance ID displayed in the database console page.</td>
</tr>
<tr>
<td>Memory</td>
<td>Yes</td>
<td>Integer</td>
<td>The memory capacity to which the instance will be upgraded (in GB).</td>
</tr>
<tr>
<td>Volume</td>
<td>Yes</td>
<td>Integer</td>
<td>The disk capacity to which the instance will be upgraded (in GB).</td>
</tr>
<tr>
<td>OplogSize</td>
<td>No</td>
<td>Integer</td>
<td>The Oplog capacity to which the instance will be upgraded (in GB). It is 10% of the disk capacity by default. The minimum value allowed is 10% of disk capacity, and the maximum is 90% of disk capacity.</td>
</tr>
</tbody>
</table>

3. Output Parameters

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DealId</td>
<td>String</td>
<td>Order ID</td>
</tr>
<tr>
<td>RequestId</td>
<td>String</td>
<td>The unique ID of a request, which is required for each troubleshooting case.</td>
</tr>
</tbody>
</table>
4. Example

Example 1 Upgrade a pay-as-you-go database instance
You need to upgrade a monthly subscription database instance using an API.

Input example

https://mongodb.tencentcloudapi.com/?Action=UpgradeDBInstance
&Memory=4
&Volume=250
&InstanceId=cmgo-f555zzzz
&OplogSize=26
&<Common request parameters>

Output example

{
   "Response": {
      "RequestId": "be8f4a30-ea2e-4623-8b6b-0ccce04cd9f7",
      "DealId": "19297475"
   }
}

5. Resources for Developers

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- Tencent Cloud SDK 3.0 for .NET

Command line tools

- Tencent Cloud CLI 3.0

6. Error Codes
The following only lists the error codes related to this API. For other error codes, see [Common Error Codes](#).

<table>
<thead>
<tr>
<th>Error Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>InvalidParameter</td>
<td>Invalid parameter</td>
</tr>
</tbody>
</table>
UpgradeDBInstanceHour

Last updated: 2019-09-09 15:18:01

1. API Description

Domain name for API request: mongodb.tencentcloudapi.com.

This API (UpgradeDBInstanceHour) is used to upgrade a pay-as-you-go MongoDB database instance to expand memory, storage and Oplog capacity.

Default request rate limit: 20/sec.

Note: This API supports Finance regions. Finance and non-Finance regions are isolated from each other. Therefore, if the common parameter Region is a Finance region (such as ap-shanghai-fsi), you need to specify a domain name containing the Finance region specified in the Region field, for example: mongodb.ap-shanghai-fsi.tencentcloudapi.com.

2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see Common Request Parameters.

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Required</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Action</td>
<td>Yes</td>
<td>String</td>
<td>Common parameter. The value used for this API: UpgradeDBInstanceHour.</td>
</tr>
<tr>
<td>Version</td>
<td>Yes</td>
<td>String</td>
<td>Common parameter. The value used for this API: 2018-04-08</td>
</tr>
<tr>
<td>Region</td>
<td>Yes</td>
<td>String</td>
<td>Common parameter. For more information, see the list of regions supported by the product.</td>
</tr>
<tr>
<td>InstanceId</td>
<td>Yes</td>
<td>String</td>
<td>Instance ID, such as: cmgo-p8vmipr5.</td>
</tr>
<tr>
<td>Memory</td>
<td>Yes</td>
<td>Integer</td>
<td>The memory capacity to which the instance will be upgraded (in GB).</td>
</tr>
<tr>
<td>Volume</td>
<td>Yes</td>
<td>Integer</td>
<td>The disk capacity to which the instance will be upgraded (in GB).</td>
</tr>
<tr>
<td>OplogSize</td>
<td>No</td>
<td>Integer</td>
<td>The Oplog capacity to which the instance will be upgraded (in GB). It is 10% of the disk capacity by default. The minimum value allowed is 10% of disk capacity, and the maximum is 90% of disk capacity.</td>
</tr>
</tbody>
</table>

3. Output Parameters

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DealId</td>
<td>String</td>
<td>Order ID</td>
</tr>
<tr>
<td>RequestId</td>
<td>String</td>
<td>The unique ID of a request, which is required for each troubleshooting case.</td>
</tr>
</tbody>
</table>
4. Example

Example 1 Upgrade a pay-as-you-go database instance
You need to upgrade a pay-as-you-go database instance using an API.

Input example

https://mongodb.tencentcloudapi.com/?Action=UpgradeDBInstanceHour
&Memory=4
&Volume=250
&InstanceId=cmgo-f555zzz
&OplogSize=25
&<Common request parameters>

Output example

{
  "Response": {
    "RequestId": "6EF60BEC-0242-43AF-BB20-270359FB54A7",
    "DealId": "2017120116000000267026599824833"
  }
}

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Command line tools

- Tencent Cloud CLI 3.0

6. Error Codes
The following only lists the error codes related to this API. For other error codes, see Common Error Codes.

<table>
<thead>
<tr>
<th>Error Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>InvalidParameter</td>
<td>Invalid parameter</td>
</tr>
</tbody>
</table>
Feature Description

If the Error field exists in the returned result, it means the API call failed. For example:

```json
{
    "Response": {
        "Error": {
            "Code": "AuthFailure.SignatureFailure",
            "Message": "The provided credentials could not be validated. Please check your signature is correct."
        },
        "RequestId": "ed93f3cb-f35e-473f-b9f3-0d451b8b79c6"
    }
}
```

Code in the Error field indicates the error code, and Message indicates the error message.

### Error Codes

#### Common Error Codes

<table>
<thead>
<tr>
<th>Error Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AuthFailure.InvalidSecretId</td>
<td>Invalid key (it is not a cloud API key)</td>
</tr>
<tr>
<td>AuthFailure.MFAFailure</td>
<td>MFA failure</td>
</tr>
<tr>
<td>AuthFailure.SecretIdNotFound</td>
<td>Key does not exist. Check whether the key has been deleted or disabled in the console, and if not, check whether the key is correctly entered. Note that there shall be no space before or after the key.</td>
</tr>
<tr>
<td>AuthFailure.SignatureExpire</td>
<td>Signature expired. The difference between the timestamp and the server time cannot exceed 5 minutes. Check whether the local time is synced with the standard time.</td>
</tr>
<tr>
<td>AuthFailure.SignatureFailure</td>
<td>Invalid signature. Signature computing error. Check the signature computing process by referring to the documentation about API authentication in the calling method.</td>
</tr>
<tr>
<td>AuthFailure.TokenFailure</td>
<td>Invalid token</td>
</tr>
<tr>
<td>AuthFailure.UnauthorizedOperation</td>
<td>No CAM authorization</td>
</tr>
<tr>
<td>DryRunOperation</td>
<td>DryRun operation. It means that the request is successful, except that the DryRun parameter is passed additionally.</td>
</tr>
<tr>
<td>FailedOperation</td>
<td>Operation failed</td>
</tr>
<tr>
<td>InternalError</td>
<td>Internal error</td>
</tr>
<tr>
<td>InvalidAction</td>
<td>API does not exist</td>
</tr>
<tr>
<td>InvalidParameter</td>
<td>Incorrect parameter</td>
</tr>
<tr>
<td>Error Code</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-----------------------------------------------------------</td>
</tr>
<tr>
<td>InvalidParameterValue</td>
<td>Invalid parameter value</td>
</tr>
<tr>
<td>LimitExceeded</td>
<td>Quota limit is exceeded</td>
</tr>
<tr>
<td>MissingParameter</td>
<td>A parameter is missing</td>
</tr>
<tr>
<td>NoSuchVersion</td>
<td>The API version does not exist</td>
</tr>
<tr>
<td>RequestLimitExceeded</td>
<td>The request rate limit is exceeded</td>
</tr>
<tr>
<td>ResourceInUse</td>
<td>Resource is occupied</td>
</tr>
<tr>
<td>ResourceInsufficient</td>
<td>Insufficient resource</td>
</tr>
<tr>
<td>ResourceNotFound</td>
<td>Resource does not exist.</td>
</tr>
<tr>
<td>ResourceUnavailable</td>
<td>Resource is unavailable</td>
</tr>
<tr>
<td>UnauthorizedOperation</td>
<td>Unauthorized operation</td>
</tr>
<tr>
<td>UnknownParameter</td>
<td>Unknown parameter</td>
</tr>
<tr>
<td>UnsupportedOperation</td>
<td>Unsupported operation</td>
</tr>
<tr>
<td>UnsupportedProtocol</td>
<td>Unsupported HTTP(S) request protocol. Only GET and POST requests are supported.</td>
</tr>
<tr>
<td>UnsupportedRegion</td>
<td>Unsupported region</td>
</tr>
</tbody>
</table>

**Service Error Codes**

<table>
<thead>
<tr>
<th>Error Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>InternalError.AsyncRequestError</td>
<td>An error occurred while querying an async task.</td>
</tr>
<tr>
<td>InvalidParameter</td>
<td>Invalid parameter</td>
</tr>
</tbody>
</table>
You can call a TencentCloud API by sending a request to the API server address that contains the request parameters specified in the API description. The structure of a TencentCloud API request consists of service address, communication protocol, request method, request parameters, and character encoding, as detailed below:

Service Address

The service access address of TencentCloud API depends on the specific module. For more information, see the descriptions of each API.

Communication Protocol

Most of TencentCloud APIs communicate via HTTPS, providing highly secure communication tunnels.

Request Method

TencentCloud API supports both POST and GET requests.

1. POST and GET requests cannot be used together. If GET is used, the parameters are taken from the query string. If POST is used, the parameters are taken from the request body, and the parameters in the query string are ignored. The parameter format rules of the two request methods are identical. GET requests are generally used. If the parameter string is too long, POST is recommended.

2. If the GET method is used, all request parameters need to be URL-encoded. This is not required if the POST method is used.

3. The maximum length of GET requests varies by browser and server settings. For example, the limit is 2 KB in IE and 8 KB in Firefox. For long API requests with a lot of parameters, we recommend using the POST method so as to avoid request failure due to overlong string.

4. For POST requests, the input parameters should be in the form of `x-www-form-urlencoded`, because TencentCloud API acquires the request parameters from `$POST`.

Request Parameters

Two types of parameters are required for each Tencent Cloud API request: common request parameters and API request parameters. Common request parameters are required for every API (see Common Request Parameters, while API request parameters are specific to each API.
parameters are specific to each API (see "Request Parameters" in each API document).

Character Encoding

Both the request and returned result of TencentCloud API are encoded using the UTF-8 character set.
Common Request Parameters

This is a legacy API and may be deprecated in the future. It is currently not displayed on the left sidebar. We recommend using CVM API v3.0, which is more standardized and has much lower access latency.

A complete TencentCloud API request requires two types of request parameters: common request parameters and API request parameters. This document describes the six common request parameters required by TencentCloud API requests. For detailed descriptions of API request parameters, see API Request Parameters.

Common request parameters are required in every API. When using TencentCloud APIs to send requests, make sure that the common request parameters are passed in; otherwise, the requests will fail. Common request parameters should always begin with a capital letter so that they can be differentiated from API request parameters.

The following lists the specific common request parameters:

**Note:**
This document illustrates APIs specific to Tencent Cloud CVMs. For APIs specific to other Tencent Cloud products, see the relevant documents.

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Description</th>
<th>Type</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Action</td>
<td>Name of an action-specific API. For example, when a Tencent Cloud CVM user calls the API Querying Instance List, the Action parameter is DescribeInstances.</td>
<td>String</td>
<td>Yes</td>
</tr>
</tbody>
</table>
| Region | The Region parameter, which is used to identify the region of the instance you want to work with. For more information, see Regions and Availability Zones or call the Query Region List API.  
**Note:** 1. Unless otherwise specified in the API document, this parameter is required.  
2. Certain regions are currently in beta and only available to whitelisted users. | String | No |
<p>| Timestamp | The current UNIX timestamp that records the time when the API request is initiated. | UInt | Yes |
| Nonce | The user-defined random positive integer, which is used in conjunction with Timestamp to prevent replay attacks. | UInt | Yes |
| SecretId | An ID that the user applies for on the TencentCloud API Key for identity authentication. A SecretId is paired with a unique SecretKey, which is used to generate the request signature. For more information, see Signature Method. | String | Yes |
| Signature | The request signature, which is used to verify the validity of this request. It is generated based on the actual input parameters. For the calculation method, see Signature Method. | String | Yes |</p>
<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Description</th>
<th>Type</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>SignatureMethod</td>
<td>Signature method. Supported methods are HmacSHA256 and HmacSHA1. The HmacSHA256 method is used to verify signatures only when the parameter is specified as HmacSHA256. Otherwise, HmacSHA1 is used. For more information, see Signature Method.</td>
<td>String</td>
<td>No</td>
</tr>
<tr>
<td>Token</td>
<td>The token used by the temporary certificate, which needs to be used in conjunction with the temporary key. No token is required for permanent keys.</td>
<td>String</td>
<td>No</td>
</tr>
</tbody>
</table>

**Use Cases**

The following example shows how a common request parameter looks like in a Tencent Cloud API request. For example, if you want to query the list of Tencent Cloud CVM instances in Guangzhou regions, the desired request format is:

```plaintext
https://cvm.api.qcloud.com/v2/index.php?
Action=DescribeInstances
&SecretId=xxxxxxx
&Region=ap-guangzhou
&Timestamp=1465055529
&Nonce=59485
&Signature=mysignature
&SignatureMethod=HmacSHA256
&<Common request parameter>
```
API Request Parameters

Last updated: 2019-09-19 16:48:43

A complete TencentCloud API request requires two types of request parameters: common request parameters and API request parameters. This document describes the API request parameters required by TencentCloud API requests. For detailed descriptions of common request parameters, see Common Request Parameters.

API request parameters vary by API. API request parameters should always begin with a lowercase letter so that they can be differentiated from common request parameters.

This document illustrates parameters specific to Tencent Cloud CVMs. For parameters specific to other Tencent Cloud products, see the relevant API documents.

For example, the Tencent Cloud CVM API Querying Instance List (DescribeInstances) supports the following API request parameters:

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Description</th>
<th>Type</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>instanceIds.n</td>
<td>The array of the IDs of the CVM instances to be queried, with the array subscript starting at 0. You can use instanceId and unInstanceId, and we recommend using the uniform resource ID unInstanceId.</td>
<td>String</td>
<td>No</td>
</tr>
<tr>
<td>lanIps.n</td>
<td>The array of the private IPs of the CVM instances to be queried.</td>
<td>String</td>
<td>No</td>
</tr>
<tr>
<td>searchWord</td>
<td>The user-defined CVM instance alias.</td>
<td>String</td>
<td>No</td>
</tr>
<tr>
<td>offset</td>
<td>The offset at which the entries start. The first entry is 0, the second entry is 1, and so on and so forth.</td>
<td>Int</td>
<td>No</td>
</tr>
<tr>
<td>limit</td>
<td>The maximum number of instances that can be queried at a time. The default is 20 and the maximum is 100.</td>
<td>Int</td>
<td>No</td>
</tr>
<tr>
<td>status</td>
<td>The status of the CVM instance to be queried.</td>
<td>Int</td>
<td>No</td>
</tr>
<tr>
<td>projectIds</td>
<td>The ID of the project. If this parameter is not passed in, the CVM instances of all projects will be queried. 0 indicates the default project. If you want to specify other projects, call the Query Project List API (DescribeProject) to query.</td>
<td>String</td>
<td>No</td>
</tr>
<tr>
<td>simplify</td>
<td>Obtains non-real time data if the input parameter simplify=1 is passed in.</td>
<td>Int</td>
<td>No</td>
</tr>
<tr>
<td>zoneId</td>
<td>The ID of the availability zone. If this parameter is not passed in, the CVM instances in all availability zones will be queried. If you want to specify an availability zone, call the Query Availability Zone List API (DescribeAvailabilityZones) to query.</td>
<td>Int</td>
<td>No</td>
</tr>
</tbody>
</table>

The descriptions of each field are as follows:

Parameter Name: The name of the request parameter supported by the API. You can use it as an API request parameter when calling the API. A parameter name ending with ".n" represents an array, for which you need to pass in the array members individually.

Required: Indicates whether this parameter is required. "Yes" means the parameter is required when you call the API. "No" means the parameter can be left empty.
Use Cases

The following sample shows how API request parameters look in a TencentCloud API request. For example, if you want to query the list of scaling groups for a Tencent Cloud CVM, the request link should look like this:

```plaintext
https://cvm.api.qcloud.com/v2/index.php?
&Common request parameter
&instanceIds.0=ins-0hm4gvho
&instanceIds.1=ins-8oby8q00
&offset=0
&limit=20
&status=2
&zoneId=100003
```
Final Request Format

Last updated: 2019-09-18 15:24:25

Concatenation Rule

A TencentCloud API request URL is concatenated as follows:

https:// + request domain name + request path + ? + final request parameter string

The elements of each URL are described as follows:

- **Request host**: Request domain name is determined by the product or product module to which the API belongs. For example, the request domain name for the Tencent Cloud CVM API for querying instance list (DescribeInstances) is: cvm.api.qcloud.com. For the request domain names of specific products, see the description of each API.

- **Request path**: The request path for the product to which the TencentCloud API belongs. Each product has a fixed path. For example, the request path for Tencent Cloud CVM is always /v2/index.php.

- **Final request parameter string**: The API request parameter string consists of common request parameters and API request parameters.

Use Cases

The final request URL for a TencentCloud API is as follows:

Taking Tencent Cloud CVM’s Querying Instance List API (DescribeInstances) as an example, the first six parameters are common request parameters, while the last six ones are API request parameters.

https://cvm.api.qcloud.com/v2/index.php?
Action=DescribeInstances
&SecretId=xxxxxxx
&Region= gz
&Timestamp=1465055529
&Nonce=59485
&Signature=mysignature // Common request parameter
&instanceIds.0=ins-0hm4gho
&instanceIds.1=ins-8oby8q00
&offset=0
&limit=20
&status=2
&zoneId=100003 // API request parameter
This is a legacy API and may be deprecated in the future. It is currently not displayed on the left sidebar. We recommend using **CVM API v3.0**, which is more standardized and has much lower access latency.

If an API call succeeds, the **code** field in the final return result will be 0. The **message** field is empty, and the return result data is displayed.

Below is a sample:

```json
{
  "code": "0",
  "message": ""
<Return result data>
}
```
This is a legacy API and may be deprecated in the future. It is currently not displayed on the left sidebar. We recommend using CVM API v3.0, which is more standardized and has much lower access latency.

If an API call fails, the `code` field in the final return result will not be 0, and a detailed error message will be displayed in the `message` field. You can go to Error Codes and use `code` and `message` to check the error information. Below is a sample of an error:

```json
{
  "code": "5100",
  "message": "(100004) incorrect projectId"
}
```
The error code included in the response packet provides the summary of results of calling and execution of Tencent Cloud APIs. Any error code other than 0 indicates the request is not properly executed. An error message describes the error in details. Users can come up with the API execution result based on the error code.

On some terminals, such as browsers, message in Chinese is displayed in Unicode and needs to be decoded.

The following table lists the error codes that may be returned by Tencent Cloud APIs:

<table>
<thead>
<tr>
<th>Error Code</th>
<th>Error Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4000</td>
<td>Invalid request parameter</td>
<td>Required parameter is missing, or parameter value is not in a correct format. For relevant error message, please see the message field in error description.</td>
</tr>
<tr>
<td>4100</td>
<td>Authentication failed</td>
<td>Signature authentication failed. Please see the Authentication section in the document.</td>
</tr>
<tr>
<td>4200</td>
<td>Request expired</td>
<td>The request has expired. Please see the Request Validity Period section in the document.</td>
</tr>
<tr>
<td>4300</td>
<td>Access denied</td>
<td>Account is blocked or not within the user range of the API.</td>
</tr>
<tr>
<td>4400</td>
<td>Quota exceeded</td>
<td>The number of requests exceeds the quota. For more information, please see the Request Quota section in the document.</td>
</tr>
<tr>
<td>4500</td>
<td>Replay attack</td>
<td>The Nonce and Timestamp parameters can ensure that each request will be executed only once on the server. Therefore, the Nonce value cannot be the same as last one, and the difference between Timestamp and Tencent server time cannot be greater than 2 hours.</td>
</tr>
<tr>
<td>4600</td>
<td>Protocol not supported</td>
<td>The protocol is not supported. For more information, please see the relevant document.</td>
</tr>
<tr>
<td>5000</td>
<td>Resource not found</td>
<td>The instance corresponding to resource ID does not exist, or the instance has been returned, or another user’s resource is accessed.</td>
</tr>
<tr>
<td>5100</td>
<td>Resource operation failed</td>
<td>The operation performed on the resource failed. For relevant error message, please see the message field in error description. Try again later or contact customer service personnel for help.</td>
</tr>
<tr>
<td>5200</td>
<td>Failed to purchase resource</td>
<td>The resource purchase failed. This is may be caused by unsupported instance configuration or insufficient resource.</td>
</tr>
<tr>
<td>5300</td>
<td>Failed to purchase resource</td>
<td>The resource purchase failed because of insufficient balance.</td>
</tr>
<tr>
<td>5400</td>
<td>Part of operations performed successfully</td>
<td>Part of the batch operations have been performed successfully. For more information, please see the returned value of method.</td>
</tr>
<tr>
<td>5500</td>
<td>Identity verification failed</td>
<td>Unable to purchase resource as the user failed to pass identity verification.</td>
</tr>
<tr>
<td>Status Code</td>
<td>Description</td>
<td>Message</td>
</tr>
<tr>
<td>------------</td>
<td>-----------------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>6000</td>
<td>Internal server error</td>
<td>An internal error occurred on the server. Try again later or contact customer service for help.</td>
</tr>
<tr>
<td>6100</td>
<td>Not supported by the version</td>
<td>This API is not supported in this version or the API is under maintenance. Note: When this error occurs, first check whether the domain of the API is correct. Different modules may have different domains.</td>
</tr>
<tr>
<td>6200</td>
<td>API temporarily unavailable</td>
<td>The API is unavailable due to maintenance. Try again later.</td>
</tr>
</tbody>
</table>
Return Format for Async Task APIs

Last updated: 2019-09-20 11:48:15

Format of Returned Results for Common Asynchronous Task APIs

Sending one request to common Asynchronous Task API allows you to operate only one type of resource at a time. For example, you can create load balancer or reset server operating system by making a call to the specified common Asynchronous Task API.

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>code</td>
<td>Int</td>
<td>Error code of the returned result. 0: success; other values: failure.</td>
<td>Yes</td>
</tr>
<tr>
<td>message</td>
<td>String</td>
<td>Error message of the returned result.</td>
<td>No</td>
</tr>
<tr>
<td>requestId</td>
<td>String</td>
<td>Task number</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Format of Returned Results for Batch Asynchronous Task APIs

With such asynchronous task APIs, multiple resources can be operated for each request, for example, changing passwords, starting or shutting down servers.

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>code</td>
<td>Int</td>
<td>Error code of the returned result. 0: success; other values: failure.</td>
<td>Yes</td>
</tr>
<tr>
<td>message</td>
<td>String</td>
<td>Error message of the returned result.</td>
<td>No</td>
</tr>
<tr>
<td>detail</td>
<td>Array</td>
<td>The code, message, and requestId of the resource operation are returned with the resource ID as the key.</td>
<td>Yes</td>
</tr>
</tbody>
</table>

For example:

```json
{
  "code": 0,
  "message": "success",
  "detail": {
    "qcm6a456b0d8f01d4b2b1f5073d3fb8cc0": {
      "code": 0,
      "message": "",
      "requestId": "1231231231231"
    },
    "qcm6a456b0d8f01d4b2b1f5073d3fb8cc0": {
      "code": 0,
      "message": "",
      "requestId": "1231231231232"
    }
  }
}
```
- If the operation succeeds for all resources, the outermost code is 0.
- If the operation fails for all resources, the outermost code is 5100.
- If the operation fails for some resources, the outermost code is 5400.
- In the third case, the terminal can obtain information about the failed operations via the `detail` field.
This is a legacy API and may be deprecated in the future. It is currently not displayed on the left sidebar. We recommend using CVM API v3.0, which is more standardized and has much lower access latency.

TencentCloud API authenticates each access request, so each request is required to include the Signature in the common request parameters for user authentication. The signature is generated with the user’s security credentials, which consist of a SecretId and a SecretKey. Users who have no security credentials can apply for one on Tencent Cloud official website; otherwise, you will not be able to call TencentCloud API.

Applying for Security Credentials

Before using TencentCloud API for the first time, you need to apply for security credentials in Tencent Cloud Console > API Key Management. Security credentials consist of a SecretId and a SecretKey.

- **SecretId** is the identity of the requester.
- **SecretKey** is used to encrypt the strings to create a signature so that Tencent Cloud server can validate the identity of the requester.

SecretKeys are very important. With this credential, you can access and manage the resources in your Tencent Cloud account via API. For security reasons, please keep your keys safe and rotate them regularly, and make sure you delete the old key when a new one is created.

How to apply for security credentials

1. Log in to the Tencent Cloud Console.
2. Click Products and select Security Credentials under Management Tools to go to the TencentCloud API Key Management page.
3. On the **API Key Management** page, click **Create Key** to create a pair of SecretId/SecretKey.

- A developer account can have up to two pairs of SecretIds/SecretKeys.
- A developer can add a QQ account as a sub-user and use it to apply for different security credentials in multiple developer consoles.
- A sub-user can only call the specified Tencent Cloud APIs with its security credential.

---

**Generating a Signature String**

After obtaining the security credentials (SecretId and SecretKey), you can generate a signature.

For example, when you call Tencent Cloud CVM's API **Viewing Instance List** (DescribeInstances), the request parameters are as follows:

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Description</th>
<th>Parameter value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Action</td>
<td>Method name</td>
<td>DescribeInstances</td>
</tr>
<tr>
<td>SecretId</td>
<td>Key ID</td>
<td>AKIDz8krbsJ5yKBZQpn74WFkmLPx3gnPhESA</td>
</tr>
<tr>
<td>Timestamp</td>
<td>Current timestamp</td>
<td>1465185768</td>
</tr>
<tr>
<td>Nonce</td>
<td>Random positive integer</td>
<td>11886</td>
</tr>
<tr>
<td>Region</td>
<td>Region where the instance is located</td>
<td>ap-guangzhou</td>
</tr>
<tr>
<td>SignatureMethod</td>
<td>Signature method</td>
<td>HmacSHA256</td>
</tr>
<tr>
<td>InstanceIds.0</td>
<td>ID of the instance to be queried</td>
<td>ins-09dx96dg</td>
</tr>
</tbody>
</table>

---

**1. Sorting Parameters**
First, sort all request parameters by parameter name in ascending lexicographical order, just like sorting words in a dictionary in ascending alphabetical order or numerical order. That is to say, sort the parameters by their first letters, and then sort the parameters with the same first letter by their second letters, and so on. You can do this with the aid of relevant sorting functions in the programming language, such as the ksort function in PHP. The sorting results of the above sample parameters are as follows:

```json
{
  "Action" : "DescribeInstances",
  "InstanceIds.0" : "ins-09dx96dg",
  "Nonce" : "11886",
  "Region" : "ap-guangzhou",
  "SecretId" : "AKIDz8krbsJ5yKBZQpn74WFkmLPx3gnPhESA",
  "SignatureMethod" : "HmacSHA256",
  "Timestamp" : "1465185768"
}
```

Any other programming language can be used to sort these parameters as long as the same result is produced.

### 2. Generating Request String

This step generates a request string.

Assign values to the parameters (see the previous step) by following the logic "parameter name"="parameter value". For example, if the value of "Action" is "DescribeInstances", then Action=DescribeInstances.

- "Parameter value" is the original value, instead of the URL encoded value.
- If the key of an input parameter contains an underscore, the underscore should be replaced with a \\_; however, underscores in the value do not need to be replaced. For example, Placement.Zone=CN_GUANGZHOU should be converted to Placement.Zone=CN\_GUANGZHOU.

Then, concatenate the formatted parameters with \\& to generate the request string (ignore the link breaks here):

```
Action=DescribeInstances
&InstanceIds.0=ins-09dx96dg
&Nonce=11886
&Region=ap-guangzhou
&SecretId=AKIDz8krbsJ5yKBZQpn74WFkmLPx3gnPhESA
&SignatureMethod=HmacSHA256
&Timestamp=1465185768
```

### 3. Concatenating a Signature Original String

This step generates a signature original string.

The structure for a signature original string is as follows:

```plaintext
request method + request host + request path + ? + request string
```

The parameters are as detailed below:

**Request method**: Both POST and GET methods are supported. GET is used here. Note that the method name should be in all capital letters.

**Request host**: This is the host domain name. Request domain name is determined by the product or product module to which the API belongs. For example, the request domain name for the Tencent Cloud CVM API for querying instance list
(DescribeInstances) is: cvm.api.qcloud.com. For the request domain names of specific products, see the description of each API.

- **Request path**: The request path for the product to which the Tencent Cloud API belongs. Each product has a fixed path. For example, the request path for Tencent Cloud CVM is always /v2/index.php.
- **Request string**: This is the request string generated in the previous step.

The resulting original signature string in the above example is as follows (ignore the line breaks in the text):

```plaintext
GETcvm.api.qcloud.com/v2/index.php?Action=DescribeInstances&InstanceIds.0=ins-09dx96dg&Nonce=11886&Region=ap-guangzhou&SecretId=AKIDz8krbsJ5yKBZQpn74WfkmLPx3gnPhESA&SignatureMethod=HmacSHA256&Timestamp=1465185768
```

### 4. Generating Signature String

This step generates a signature string.

There are two ways to calculate a signature: HmacSHA256 and HmacSHA1. Here, a signature string is generated based on the specified signature algorithm (i.e., the `SignatureMethod` parameter). The signature will be calculated with the HmacSHA256 algorithm if `SignatureMethod` is specified as HmacSHA256. In other cases, the signature will be calculated with HmacSHA1.

First, create a hash-based message authentication code (HMAC) that uses HmacSHA256 or HmacSHA1 protocols to sign the string from the previous step, then encode the resulting signature to Base64.

In this example, we use PHP language and calculate the signature using **HmacSHA256** (Note: you can use any other programming languages as long as the resulting signature is the same as the one in this example). The sample code is shown as follows:

```php
$secretKey = 'Gu5t9xGARNpq86cd98joYQCN3Cozk1qA';
$srcStr = 'GETcvm.api.qcloud.com/v2/index.php?Action=DescribeInstances&InstanceIds.0=ins-09dx96dg&Nonce=11886&Region=ap-guangzhou&SecretId=AKIDz8krbsJ5yKBZQpn74WfkmLPx3gnPhESA&SignatureMethod=HmacSHA256&Timestamp=1465185768';
$signStr = base64_encode(hash_hmac('sha256', $srcStr, $secretKey, true));

echo $signStr;
```

The final signature is:

```plaintext
0EEm/HtGRr/VJXTAD9tYMth1Bzm3ILHz5RCDv1GdM8s=
```

Similarly, if you specify the signature algorithm as **HmacSHA1**, the code to generate the signature string is as follows:

```php
$secretKey = 'Gu5t9xGARNpq86cd98joYQCN3Cozk1qA';
$srcStr = 'GETcvm.api.qcloud.com/v2/index.php?Action=DescribeInstances&InstanceIds.0=ins-09dx96dg&Nonce=11886&Region=ap-guangzhou&SecretId=AKIDz8krbsJ5yKBZQpn74WfkmLPx3gnPhESA&SignatureMethod=HmacSHA1&Timestamp=1465185768';
$signStr = base64_encode(hash_hmac('sha1', $srcStr, $secretKey, true));

echo $signStr;
```
The final signature is:

nPvY6njQmwQ8ciqbPl5Qe+Oru4=

Encoding Signature String

The signature must be URL encoded.

For example, the signature string 0EEm/HtGRr/VjXTAD9tYMth1Bzm3ILHz5RCDv1GdM8s= generated in the previous step should be encoded to 0EEm/HtGRr/VjXTAD9tYMth1Bzm3ILHz5RCDv1GdM8s=.

Therefore, the resulting request parameter for the signature string (Signature) is 0EEm/HtGRr/VjXTAD9tYMth1Bzm3ILHz5RCDv1GdM8s=, which will be used to generate the final request URL.

If you are sending a GET request, all parameters in the request need to be URL encoded. Please note that some languages may offer auto-URL encoding, and repeated encoding will cause signature verification failure.

Authentication Failure

The following errors may occur when authentication fails:

<table>
<thead>
<tr>
<th>Error Code</th>
<th>Error Type</th>
<th>Error Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4100</td>
<td>Authentication failed</td>
<td>Make sure the signature added to your request is calculated correctly (see steps above as reference) and URL encoded.</td>
</tr>
<tr>
<td>4101</td>
<td>No API access authorization</td>
<td>The sub-user is not authorized to call this API. Please contact the developer for authorization. For more information, see Authorization Policy.</td>
</tr>
<tr>
<td>4102</td>
<td>No authorization to access resources</td>
<td>You are not authorized to access resources used by this API. Check the relevant resource IDs in the message field and contact the developer for authorization. For more information, see Authorization Policy.</td>
</tr>
<tr>
<td>4103</td>
<td>Non-developer's SecretId cannot be used to call this API</td>
<td>The sub-user's SecretId cannot be used to call this API. Only the developer has the access to this API.</td>
</tr>
<tr>
<td>4104</td>
<td>SecretId does not exist</td>
<td>The SecretId does not exist, or the status of SecretKey is incorrect. Please make sure that the API key is valid and enabled.</td>
</tr>
<tr>
<td>4110</td>
<td>Authentication failed</td>
<td>Permission verification failed. Please make sure that you are granted the permission to access the resources.</td>
</tr>
<tr>
<td>4500</td>
<td>Replay attack error</td>
<td>Please note that the Nonce parameter must be unique, and the difference between Timestamp and Tencent server time should not be greater than 2 hours.</td>
</tr>
</tbody>
</table>
Use Cases

Here is a use case to help you quickly get started with TencentDB for MongoDB APIs.

This sample shows how to create an instance: First, query the supported specification of the instance; then, query the fees for creating the instance and create the instance using the instance creation API; finally, query the instance creation progress using the order details querying API.

1. Querying Supported Instance Specifications

Before creating an instance, query the specifications of instances that can be created using the Query Available Specification API.

The input parameters for this API (supporting custom availability zones and configurations) are as follows:

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Required</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>zoneIds.n</td>
<td>No</td>
<td>String</td>
<td>The array of availability zone IDs, with the array subscript starting at 0. If this parameter is not passed in, the product information of all availability zones will be returned</td>
</tr>
<tr>
<td>Value</td>
<td></td>
<td></td>
<td>100002</td>
</tr>
</tbody>
</table>

Availability zones are defined as follows:

<table>
<thead>
<tr>
<th>Availability Zone</th>
<th>zoneId</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guangzhou Zone 1</td>
<td>100001</td>
</tr>
<tr>
<td>Guangzhou Zone 2</td>
<td>100002</td>
</tr>
<tr>
<td>Guangzhou Zone 3</td>
<td>100003</td>
</tr>
<tr>
<td>Shanghai Zone 1</td>
<td>200001</td>
</tr>
<tr>
<td>Hong Kong Zone 1</td>
<td>300001</td>
</tr>
<tr>
<td>Toronto Zone 1</td>
<td>400001</td>
</tr>
<tr>
<td>Beijing Zone 1</td>
<td>800001</td>
</tr>
</tbody>
</table>

The return value of the Query Available Specification API (supporting custom availability zones and configurations) is the configuration information of the creatable instances under each availability zone. Taking the configuration information of instances in Guangzhou Zone 2 in the return value as an example, the fields are as defined below:

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>region</td>
<td>String</td>
<td>The ID of the region. For more information, see Common Request Parameters</td>
</tr>
<tr>
<td>isSupportVpc</td>
<td>Bool</td>
<td>Whether VPC is supported. Valid values: true, false</td>
</tr>
<tr>
<td>types</td>
<td>Object</td>
<td>Supported instance specification information</td>
</tr>
</tbody>
</table>

Here, types indicates the supported instance specification information and is composed as follows:
<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>typeId</td>
<td>String</td>
<td>The name of the instance type. GIO: high-IO edition; TGIO: 10-Gigabit high-IO edition</td>
</tr>
<tr>
<td>replicationNodeNum</td>
<td>Array</td>
<td>Number of nodes of replica set. Only 2 and 3 are supported currently</td>
</tr>
<tr>
<td>memory</td>
<td>Int</td>
<td>The memory size of the instance in MB. Each memory value corresponds to a selectable disk capacity range</td>
</tr>
<tr>
<td>volumeMax</td>
<td>Int</td>
<td>The maximum value of the selectable disk capacity of the instance in GB after the memory size is specified</td>
</tr>
<tr>
<td>volumeMin</td>
<td>Int</td>
<td>The minimum value of the selectable disk capacity of the instance in GB after the memory size is specified</td>
</tr>
<tr>
<td>volumeStep</td>
<td>Int</td>
<td>The increment of the disk capacity of the instance in GB after the memory size is specified. For instance creation, the value for the disk (volume) is: volume = volumeMin + volumeStep * n, where volumeMin &lt;= volume &lt;= volumeMax</td>
</tr>
<tr>
<td>version</td>
<td>Array</td>
<td>Supported database version number, for example: MONGO_3_MMAP, MONGO_3_WT</td>
</tr>
</tbody>
</table>

By combining common request parameters and API request parameters, you can generate the final request as shown below:

```plaintext
https://mongodb.api.qcloud.com/v2/index.php?
Action=DescribeMongoDBProduct
&SecretId=AKIDVxZ0PsvtPCgNEtsO0pSFwqkeTMFCu7z1
&Signature=eSCz5paiDrXsdifc0Eq0GEihzsl%3D
&Nonce=23284
&Timestamp=1468329994
&Region=gz
&zonelids.0=100002
```

The return result of the above request is as follows:

```json
{
"code": 0,
"message": "",
"codeDesc": "Success",
"data": {
"timeSpan": [
1,
2,
3,
4,
5,
6,
7,
8,
9,
10,
11,
12,
24,
36
],
"timeUnit": "m"
}
```
"goodsDescription": {
"100002": {
"region": 'gz',
"isSupportVpc": true,
"types": [
{ "typeld": "GIO",
  "replicationNodeNum": [ 2, 3 ],
  "memory": 2048,
  "volumeMax": 250,
  "volumeMin": 25,
  "volumeStep": 5,
  "version": [ "MONGO_3_MMAP", "MONGO_3_WT" ]
},
{ "typeld": "GIO",
  "replicationNodeNum": [ 2, 3 ],
  "memory": 4096,
  "volumeMax": 250,
  "volumeMin": 25,
  "volumeStep": 5,
  "version": [ "MONGO_3_MMAP", "MONGO_3_WT" ]
},
{ "typeld": "GIO",
  "replicationNodeNum": [ 2, 3 ],
  "memory": 6144,
  "volumeMax": 250,
  "volumeMin": 25,
  "volumeStep": 5,
  "version": [ "MONGO_3_MMAP", "MONGO_3_WT" ]
},
{ "typeld": "GIO",
  "replicationNodeNum": [ 2, 3 ],
  "memory": 8192,
  "volumeMax": 250,
  "volumeMin": 25,
  "volumeStep": 5,
  "version": [ "MONGO_3_MMAP", "MONGO_3_WT" ]
}]}
"memory": 8192,
"volumeMax": 500,
"volumeMin": 25,
"volumeStep": 5,
"version": [
  "MONGO_3_MMAP",
  "MONGO_3_WT"
],
},
{
  "typeId": "GIO",
  "replicationNodeNum": [
    2,
    3
  ],
  "memory": 12288,
  "volumeMax": 500,
  "volumeMin": 25,
  "volumeStep": 5,
  "version": [
    "MONGO_3_MMAP",
    "MONGO_3_WT"
  ],
},
{
  "typeId": "GIO",
  "replicationNodeNum": [
    2,
    3
  ],
  "memory": 16384,
  "volumeMax": 500,
  "volumeMin": 25,
  "volumeStep": 5,
  "version": [
    "MONGO_3_MMAP",
    "MONGO_3_WT"
  ],
},
{
  "typeId": "GIO",
  "replicationNodeNum": [
    2,
    3
  ],
  "memory": 24576,
  "volumeMax": 500,
  "volumeMin": 25,
  "volumeStep": 5,
  "version": [
    "MONGO_3_MMAP",
    "MONGO_3_WT"
  ],
}.
"replicationNodeNum": [2, 3],
"memory": 32768,
"volumeMax": 500,
"volumeMin": 25,
"volumeStep": 5,
"version": [
"MONGO_3_MMAP",
"MONGO_3_WT"
],
},
{
"typeId": "GIO",
"replicationNodeNum": [2, 3],
"memory": 49152,
"volumeMax": 750,
"volumeMin": 25,
"volumeStep": 5,
"version": [
"MONGO_3_MMAP",
"MONGO_3_WT"
],
},
{
"typeId": "GIO",
"replicationNodeNum": [2, 3],
"memory": 61440,
"volumeMax": 1000,
"volumeMin": 25,
"volumeStep": 5,
"version": [
"MONGO_3_MMAP",
"MONGO_3_WT"
],
},
{
"typeId": "GIO",
"replicationNodeNum": [2, 3],
"memory": 65536,
"volumeMax": 1000,
"volumeMin": 25,
"volumeStep": 5,
"version": [
"MONGO_3_MMAP",
"MONGO_3_WT"
]
]}
},
{
  "typeId": "CY",
  "replicationNodeNum": [
  2,
  3
  ],
  "memory": 4096,
  "volumeMax": 300,
  "volumeMin": 50,
  "volumeStep": 5,
  "version": [
  "MONGO_3_MMAP",
  "MONGO_3_WT"
  ]
},
{
  "typeId": "CY",
  "replicationNodeNum": [
  2,
  3
  ],
  "memory": 8192,
  "volumeMax": 300,
  "volumeMin": 100,
  "volumeStep": 5,
  "version": [
  "MONGO_3_MMAP",
  "MONGO_3_WT"
  ]
},
{
  "typeId": "CY",
  "replicationNodeNum": [
  2,
  3
  ],
  "memory": 16384,
  "volumeMax": 600,
  "volumeMin": 200,
  "volumeStep": 5,
  "version": [
  "MONGO_3_MMAP",
  "MONGO_3_WT"
  ]
},
{
  "typeId": "CY",
  "replicationNodeNum": [
  2,
  3
  ],
  "memory": 32768,
  "volumeMax": 1200,
  "volumeMin": 400,
"volumeStep": 5,
"version": [
  "MONGO_3_MMAP",
  "MONGO_3_WT"
],
"typeld": "CY",
"replicationNodeNum": [2, 3],
"memory": 65536,
"volumeMax": 4000,
"volumeMin": 750,
"volumeStep": 5,
"version": [
  "MONGO_3_MMAP",
  "MONGO_3_WT"
],
"typeld": "CY",
"replicationNodeNum": [2, 3],
"memory": 131072,
"volumeMax": 6000,
"volumeMin": 1500,
"volumeStep": 5,
"version": [
  "MONGO_3_MMAP",
  "MONGO_3_WT"
],
"typeld": "CY",
"replicationNodeNum": [2, 3],
"memory": 245760,
"volumeMax": 6000,
"volumeMin": 1500,
"volumeStep": 5,
"version": [
  "MONGO_3_MMAP",
  "MONGO_3_WT"
],
"typeld": "CY",
"replicationNodeNum": [2, 3]
2. Querying Order Details

After creating an instance, use the Query Order Details API to query the order details with the dealId in the return value.

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Required</th>
<th>Type</th>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>dealIds.n</td>
<td>Yes</td>
<td>String</td>
<td>The array of order IDs, with the array subscript starting at 0</td>
<td>3373037</td>
</tr>
</tbody>
</table>

By combining common request parameters and API request parameters, you can generate the final request as shown below:

```
https://mongodb.api.qcloud.com/v2/index.php?
Action=DescribeMongodbDealDetail
&Timestamp=1468329117
&Nonce=40727
&SecretId=AKIDVxZ0PsvtPCgNEts0pSFwqkeTMFCu7z1
&Signature=Y9rMWWyjojSi6zJxMW822edGk%3D
&dealIds.0=3373037
```

The output is as follows:

```
{
  "code": 0,
  "message": "",
  "codeDesc": "Success",
  "details": [
    {
      "dealId": "3373037",
      "dealName": "20170206121420",
      "zoneId": 100002,
      "goodsNum": 1,
      "creater": "3374998458",
      "createTime": "2017-02-06 14:07:46",
      "overdueTime": "2017-02-21 14:07:46",
      "endTime": "2017-02-06 14:11:54",
      "status": 4,
      "price": 72200,
      "goodsDetail": {
```

Tencent Cloud
The `details` in the return value of the Query Order Details API indicates the array of order details with the following fields:

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>details.dealId</td>
<td>String</td>
<td>Short order ID. Use this ID when calling the TencentCloud API</td>
</tr>
<tr>
<td>details.dealName</td>
<td>String</td>
<td>Long order ID. Use this ID when reporting order-related problems to customer service</td>
</tr>
<tr>
<td>details.zoneld</td>
<td>Int</td>
<td>Availability Zone ID</td>
</tr>
<tr>
<td>details.goodsNum</td>
<td>Int</td>
<td>Number of instances associated with the order</td>
</tr>
<tr>
<td>details.creater</td>
<td>String</td>
<td>The UIN of the order creator</td>
</tr>
<tr>
<td>details.creatTime</td>
<td>String</td>
<td>Order creation time</td>
</tr>
<tr>
<td>details.overdueTime</td>
<td>String</td>
<td>Order expiration time</td>
</tr>
<tr>
<td>details.endTime</td>
<td>String</td>
<td>The completion time of the order</td>
</tr>
</tbody>
</table>
| details.status   | Int    | The status of the order.  
1: unpaid;  
2: paid but not shipped;  
3: in transition;  
4: successfully shipped;  
5: shipment failed;  
6: refunded;  
7: order closed;  
8: order expired;  
9: order invalidated;  
10: product invalidated;  
11: requested payment rejected;  
12: payment in process |
| details.price    | Int    | The actual total price of the order in 0.01 USD                             |
| details.goodsDetail | Object | Details of the items associated with the order |

`goodsDetail` returned upon instance creation:
<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>memSize</td>
<td>int</td>
<td>The memory size of the instance in MB</td>
</tr>
<tr>
<td>disksize</td>
<td>int</td>
<td>The disk capacity of the instance in GB</td>
</tr>
<tr>
<td>typeId</td>
<td>String</td>
<td>The type name of the instance. GIO: high-IO edition; TGIO: 10-Gigabit high-IO edition</td>
</tr>
<tr>
<td>clusterType</td>
<td>Array</td>
<td>The cluster type of the instance. Only replica set is available currently</td>
</tr>
<tr>
<td>secondaryNum</td>
<td>Array</td>
<td>Number of slave nodes of replica set. Only 1 and 2 are supported currently</td>
</tr>
<tr>
<td>zoneId</td>
<td>Array</td>
<td>Availability Zone ID</td>
</tr>
<tr>
<td>mongoVersion</td>
<td>Array</td>
<td>Database version number, for example: MONGO_3_MMAP, MONGO_3_WT</td>
</tr>
<tr>
<td>timeSpan</td>
<td>Array</td>
<td>The validity period of the instance, with the unit being subject to the return value of <code>timeUnit</code></td>
</tr>
<tr>
<td>timeUnit</td>
<td>Array</td>
<td>The unit of the validity period of the instance, m: month; d: day</td>
</tr>
<tr>
<td>SerialIds</td>
<td>Array</td>
<td>The array of instance IDs</td>
</tr>
</tbody>
</table>

**goodsDetail returned when the instance is renewed:**

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>curDeadline</td>
<td>String</td>
<td>The expiration time of the instance before renewal</td>
</tr>
<tr>
<td>timeSpan</td>
<td>int</td>
<td>Renewed period, with the unit being subject to the return value of <code>timeUnit</code></td>
</tr>
<tr>
<td>timeUnit</td>
<td>String</td>
<td>The unit of the renewed period, m: month; d: day</td>
</tr>
<tr>
<td>SerialIds</td>
<td>Array</td>
<td>The array of instance IDs</td>
</tr>
</tbody>
</table>

**goodsDetail returned when the instance is upgraded:**

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>curDeadline</td>
<td>String</td>
<td>Instance expiration time</td>
</tr>
<tr>
<td>newMemsize</td>
<td>int</td>
<td>The memory size of the instance after upgrade in MB</td>
</tr>
<tr>
<td>newDisksize</td>
<td>int</td>
<td>The disk capacity of the instance after upgrade in GB</td>
</tr>
<tr>
<td>oldMemsize</td>
<td>int</td>
<td>The memory size of the instance before upgrade in MB</td>
</tr>
<tr>
<td>oldDisksize</td>
<td>int</td>
<td>The disk capacity of the instance before upgrade in GB</td>
</tr>
<tr>
<td>SerialIds</td>
<td>Array</td>
<td>The array of instance IDs</td>
</tr>
</tbody>
</table>
Region API
Query Available Specification
Last updated : 2017-05-03 15:08:54

1. API Description
This API (DescribeMongoDBProduct) is used to query supported instance specifications. It can return the purchased usage period of creatable instances, and return the machine type, number of nodes of replica set, memory size, disk range and database version number of creatable instances by availability zone types.
You can also use API Query Instance Price (Annual or Monthly Plan) to query the prices of creatable instances, and use API Create Instance (Annual or Monthly Plan) to create a new instance.
Domain for API request: mongodb.api.qcloud.com
This API can be used to query the supported specifications under specified availability zone. Users who are not in the purchaser whitelist cannot query the details of supported specifications under the availability zone. You can apply for the purchase of the whitelist of a region by submitting a Ticket.

2. Input Parameters
The following request parameter list only provides API request parameters. Common request parameters are also needed when the API is called. For more information, please see Common Request Parameters page. The Action field for this API is DescribeMongoDBProduct.

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Required</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>zoneIds.n</td>
<td>No</td>
<td>String</td>
<td>An array of availability zone IDs, with array subscript starting from 0. If this parameter is left empty, the product information of all the availability zones will be returned</td>
</tr>
</tbody>
</table>

Availability zones are defined as follows:

<table>
<thead>
<tr>
<th>Availability Zone</th>
<th>zoneId</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guangzhou Zone 1</td>
<td>100001</td>
</tr>
<tr>
<td>Guangzhou Zone 2</td>
<td>100002</td>
</tr>
<tr>
<td>Guangzhou Zone 3</td>
<td>100003</td>
</tr>
<tr>
<td>Shanghai Zone 1</td>
<td>200001</td>
</tr>
<tr>
<td>Hong Kong Zone 1</td>
<td>300001</td>
</tr>
<tr>
<td>Toronto Zone 1</td>
<td>400001</td>
</tr>
<tr>
<td>Beijing Zone 1</td>
<td>800001</td>
</tr>
</tbody>
</table>

3. Output Parameters
<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>code</td>
<td>Int</td>
<td>Common error code; 0: Succeeded; other values: Failed. For more information, please see Common Error Codes on the Error Codes page.</td>
</tr>
<tr>
<td>message</td>
<td>String</td>
<td>Error message description. A null value indicates a success</td>
</tr>
<tr>
<td>codeDesc</td>
<td>String</td>
<td>Description of error code at business side. For a successful operation, “Success” will be returned. In case of an error, a message describing the reason for the error will be returned.</td>
</tr>
<tr>
<td>data</td>
<td>Object</td>
<td>Configuration information of supported instance specification</td>
</tr>
</tbody>
</table>

Parameter data indicates the configuration information of supported instance specification, and is composed as follows:

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>timeSpan</td>
<td>Array</td>
<td>Purchasable usage period of instance</td>
</tr>
<tr>
<td>timeUnit</td>
<td>String</td>
<td>Unit of purchasable usage period of instance (m: month; d: day)</td>
</tr>
<tr>
<td>goodsDescription</td>
<td>Object</td>
<td>Information of supported instance specification</td>
</tr>
</tbody>
</table>

Parameter goodsDescription indicates the configuration information of instance, and is composed as follows:

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>100002/100003/...</td>
<td>Object</td>
<td>Availability Zone ID</td>
</tr>
</tbody>
</table>

100002 is the availability zone ID and its value indicates the instance specification information supported under the availability zone. It is composed as follows:

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>region</td>
<td>String</td>
<td>Region ID. For more information, please see Common Request Parameters</td>
</tr>
<tr>
<td>isSupportVpc</td>
<td>Bool</td>
<td>Whether VPC is supported. Values: True and False</td>
</tr>
<tr>
<td>types</td>
<td>Object</td>
<td>Content of supported instance specification</td>
</tr>
</tbody>
</table>

Parameter types represents the supported instance specification content, and is composed as follows:

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>typeId</td>
<td>String</td>
<td>Name of instance type</td>
</tr>
<tr>
<td>replicationNodeNum</td>
<td>Array</td>
<td>Number of nodes of replica set. Only 2 and 3 are supported currently</td>
</tr>
<tr>
<td>memory</td>
<td>Int</td>
<td>Instance memory size. Each memory value corresponds to a selectable disk capacity range (in MB)</td>
</tr>
</tbody>
</table>
### Parameter Names

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>volumeMax</td>
<td>Int</td>
<td>The maximum value of the selectable capacity range of the instance hard disk (in GB) when the memory size is specified.</td>
</tr>
<tr>
<td>volumeMin</td>
<td>Int</td>
<td>The minimum value of the selectable capacity range of the instance hard disk (in GB) when the memory size is specified.</td>
</tr>
<tr>
<td>volumeStep</td>
<td>Int</td>
<td>Increment of hard disk capacity of the instance (in GB) after memory size is specified. For the creation of an instance, value for volume (capacity of hard disk) is: volume = volumeMin + volumeStep * n; (volumeMin &lt;= volume &lt;= volumeMax).</td>
</tr>
<tr>
<td>version</td>
<td>Array</td>
<td>Supported database version number, for example: MONGO_3_MMAP, MONGO_3_WT.</td>
</tr>
</tbody>
</table>

### Error Codes

The following error codes include the business logic error codes for this API.

<table>
<thead>
<tr>
<th>Error Code</th>
<th>Error Message</th>
<th>Error Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>11050</td>
<td>InvalidParameter</td>
<td>Incorrect business parameter</td>
</tr>
<tr>
<td>11060</td>
<td>ServiceUnavailable</td>
<td>The service is unavailable in the requested region currently</td>
</tr>
</tbody>
</table>

### Example

**Input**

```
&<Common request parameters>
&zoneIds.0=100002
&zoneIds.1=200001
```

**Output**

```
{
  "code": 0,
  "message": "",
  "codeDesc": "Success",
  "data": {
    "timeSpan": [
      1,
      2,
      3,
      4,
      5,
      6,
      7,
    ]
  }
}
```
"timeUnit": "m",
"goodsDescription": {
  "100002": {
    "region": "gz",
    "isSupportVpc": true,
    "types": [
      {
        "typeId": "GIO",
        "replicationNodeNum": [2, 3],
        "memory": 2048,
        "volumeMax": 250,
        "volumeMin": 25,
        "volumeStep": 5,
        "version": [
          "MONGO_3_MMAP",
          "MONGO_3_WT"
        ]
      },
      {
        "typeId": "GIO",
        "replicationNodeNum": [2, 3],
        "memory": 4096,
        "volumeMax": 250,
        "volumeMin": 25,
        "volumeStep": 5,
        "version": [
          "MONGO_3_MMAP",
          "MONGO_3_WT"
        ]
      },
      {
        "typeId": "GIO",
        "replicationNodeNum": [2, 3],
        "memory": 6144,
        "volumeMax": 250,
        "volumeMin": 25,
        "volumeStep": 5,
        "version": [
          "MONGO_3_MMAP",
          "MONGO_3_WT"
        ]
      }
    ]
  }
}
"MONGO_3_WT"
],
},
{
"typeld": "GIO",
"replicationNodeNum": [
2,
3
],
"memory": 8192,
"volumeMax": 500,
"volumeMin": 25,
"volumeStep": 5,
"version": [
"MONGO_3_MMAP",
"MONGO_3_WT"
]
},
{
"typeld": "GIO",
"replicationNodeNum": [
2,
3
],
"memory": 12288,
"volumeMax": 500,
"volumeMin": 25,
"volumeStep": 5,
"version": [
"MONGO_3_MMAP",
"MONGO_3_WT"
]
},
{
"typeld": "GIO",
"replicationNodeNum": [
2,
3
],
"memory": 16384,
"volumeMax": 500,
"volumeMin": 25,
"volumeStep": 5,
"version": [
"MONGO_3_MMAP",
"MONGO_3_WT"
]
},
{
"typeld": "GIO",
"replicationNodeNum": [
2,
3
],
"memory": 24576,
"volumeMax": 500,
"volumeMin": 25,
"volumeStep": 5,
"version": [
  "MONGO_3_MMAP",
  "MONGO_3_WT"
]
},

{ "typeId": "GIO",
  "replicationNodeNum": [2, 3],
  "memory": 32768,
  "volumeMax": 500,
  "volumeMin": 25,
  "volumeStep": 5,
  "version": [
    "MONGO_3_MMAP",
    "MONGO_3_WT"
  ]
},

{ "typeId": "GIO",
  "replicationNodeNum": [2, 3],
  "memory": 49152,
  "volumeMax": 750,
  "volumeMin": 25,
  "volumeStep": 5,
  "version": [
    "MONGO_3_MMAP",
    "MONGO_3_WT"
  ]
},

{ "typeId": "GIO",
  "replicationNodeNum": [2, 3],
  "memory": 61440,
  "volumeMax": 1000,
  "volumeMin": 25,
  "volumeStep": 5,
  "version": [
    "MONGO_3_MMAP",
    "MONGO_3_WT"
  ]
},

{ "typeId": "GIO",
  "replicationNodeNum": [2, 3],
  "memory": 73408,
  "volumeMax": 1250,
  "volumeMin": 25,
  "volumeStep": 5,
  "version": [
    "MONGO_3_MMAP",
    "MONGO_3_WT"
  ]
}
"memory": 65536,
"volumeMax": 1000,
"volumeMin": 25,
"volumeStep": 5,
"version": ["MONGO_3_MMAP",
"MONGO_3_WT"]
},

"200001": {
  "region": "sh",
  "isSupportVpc": true,
  "types": [
  {
    "typeId": "GIO",
    "replicationNodeNum": [
      2,
      3
    ],
    "memory": 2048,
    "volumeMax": 250,
    "volumeMin": 25,
    "volumeStep": 5,
    "version": ["MONGO_3_MMAP",
"MONGO_3_WT"]
  },
  {
    "typeId": "GIO",
    "replicationNodeNum": [
      2,
      3
    ],
    "memory": 4096,
    "volumeMax": 250,
    "volumeMin": 25,
    "volumeStep": 5,
    "version": ["MONGO_3_MMAP",
"MONGO_3_WT"]
  },
  {
    "typeId": "GIO",
    "replicationNodeNum": [
      2,
      3
    ],
    "memory": 6144,
    "volumeMax": 250,
    "volumeMin": 25,
"volumeStep": 5,
"version": [
  "MONGO_3_MMAP",
  "MONGO_3_WT"
],
",
"typeld": "GIO",
"replicationNodeNum": [2, 3],
"memory": 8192,
"volumeMax": 500,
"volumeMin": 25,
"volumeStep": 5,
"version": [
  "MONGO_3_MMAP",
  "MONGO_3_WT"
],
",
"typeld": "GIO",
"replicationNodeNum": [2, 3],
"memory": 12288,
"volumeMax": 500,
"volumeMin": 25,
"volumeStep": 5,
"version": [
  "MONGO_3_MMAP",
  "MONGO_3_WT"
],
",
"typeld": "GIO",
"replicationNodeNum": [2, 3],
"memory": 16384,
"volumeMax": 500,
"volumeMin": 25,
"volumeStep": 5,
"version": [
  "MONGO_3_MMAP",
  "MONGO_3_WT"
],
",
"typeld": "GIO",
"replicationNodeNum": [2, 3]


```json
],
  "memory": 24576,
  "volumeMax": 500,
  "volumeMin": 25,
  "volumeStep": 5,
  "version": ["MONGO_3_MMAP", "MONGO_3_WT"]
},
{
  "typeId": "GIO",
  "replicationNodeNum": [2, 3],
  "memory": 32768,
  "volumeMax": 500,
  "volumeMin": 25,
  "volumeStep": 5,
  "version": ["MONGO_3_MMAP", "MONGO_3_WT"]
},
{
  "typeId": "GIO",
  "replicationNodeNum": [2, 3],
  "memory": 49152,
  "volumeMax": 750,
  "volumeMin": 25,
  "volumeStep": 5,
  "version": ["MONGO_3_MMAP", "MONGO_3_WT"]
},
{
  "typeId": "GIO",
  "replicationNodeNum": [2, 3],
  "memory": 61440,
  "volumeMax": 1000,
  "volumeMin": 25,
  "volumeStep": 5,
  "version": ["MONGO_3_MMAP", "MONGO_3_WT"]
}
```
"typeId": "GIO",
"replicationNodeNum": [2, 3],
"memory": 65536,
"volumeMax": 1000,
"volumeMin": 25,
"volumeStep": 5,
"version": [
 "MONGO_3_MMAP",
 "MONGO_3_WT"
]
1. API Description

This API (InquiryMongoDB) is used to obtain the prices of replica set instances (annual or monthly plan). Queries of the prices for purchase, renewal and upgrade of instances are supported. Domain for API request: mongodb.api.qcloud.com

2. Input Parameters

The following request parameter list only provides API request parameters. Common request parameters are also needed when API is called. For more information, please see Common Request Parameters. The Action field for this API is InquiryMongoDB.

The input parameters vary with different products, as shown below:

2.1 Querying the Price for the Purchase of an Instance

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Required</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>operation</td>
<td>Yes</td>
<td>String</td>
<td>newmongodb indicating the purchase of an instance should be input</td>
</tr>
<tr>
<td>zoneId</td>
<td>Yes</td>
<td>Int</td>
<td>Availability zone ID. You can use API Query Supported Instance Specifications to obtain the supported availability zones</td>
</tr>
<tr>
<td>typeId</td>
<td>Yes</td>
<td>String</td>
<td>Name of instance type GIO: High IO; TGIO: High IO (10 GB)</td>
</tr>
<tr>
<td>memory</td>
<td>Yes</td>
<td>Int</td>
<td>Memory size of instance. Each memory value corresponds to a selectable disk capacity range (in MB)</td>
</tr>
<tr>
<td>diskSize</td>
<td>Yes</td>
<td>Int</td>
<td>Disk capacity of instance (in GB)</td>
</tr>
<tr>
<td>secondaryNum</td>
<td>Yes</td>
<td>Int</td>
<td>Number of slave nodes of replica set instance. Only 1 and 2 are supported currently</td>
</tr>
<tr>
<td>version</td>
<td>Yes</td>
<td>Int</td>
<td>Database version number, for example: MONGO_3_MMAP, MONGO_3_WT</td>
</tr>
<tr>
<td>goodsNum</td>
<td>Yes</td>
<td>Int</td>
<td>Number of instances purchased at a time</td>
</tr>
<tr>
<td>period</td>
<td>Yes</td>
<td>Int</td>
<td>Purchased usage period (in month). Value range: [1, 2, 4, 6, 7, 8, 9, 10, 11, 12, 24, 36]</td>
</tr>
</tbody>
</table>

2.2 Querying the Price for the Renewal of an Instance

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Required</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>operation</td>
<td>Yes</td>
<td>String</td>
<td>renewmongodb indicating the renewal of an instance should be input</td>
</tr>
</tbody>
</table>
### Parameter Name | Required | Type   | Description                                                                 |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>instanceId</td>
<td>Yes</td>
<td>String</td>
<td>ID of instance to work with. This can be obtained from instanceId in the returned values of API DescribeMongoDBInstances.</td>
</tr>
<tr>
<td>period</td>
<td>Yes</td>
<td>Int</td>
<td>Renewed usage period (in month), with the range of [1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 24, 36]</td>
</tr>
</tbody>
</table>

#### 2.3 Querying the Price for the Upgrade of an Instance

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Required</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>operation</td>
<td>Yes</td>
<td>String</td>
<td>upgrademongodb indicating the upgrade of an instance should be input</td>
</tr>
<tr>
<td>instanceId</td>
<td>Yes</td>
<td>String</td>
<td>ID of instance to work with. This can be obtained from instanceId in the returned values of API DescribeMongoDBInstances.</td>
</tr>
<tr>
<td>memory</td>
<td>Yes</td>
<td>Int</td>
<td>Memory size of upgraded instance. Each memory value corresponds to a selectable disk capacity range (in MB)</td>
</tr>
<tr>
<td>diskSize</td>
<td>Yes</td>
<td>Int</td>
<td>Disk capacity of upgraded instance (in GB)</td>
</tr>
</tbody>
</table>

### 3. Output Parameters

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>code</td>
<td>Int</td>
<td>Common error code; 0: Succeeded; other values: Failed. For more information, please see Common Error Codes on the Error Codes page.</td>
</tr>
<tr>
<td>message</td>
<td>String</td>
<td>Error message description. A null value indicates a success</td>
</tr>
</tbody>
</table>
| codeDesc       | String | Description of error code at business side. For a successful operation, "Success" will be returned. In case of an error, a message describing the reason for the error will be returned.
| data           | Object | Instance price content                                                     |

Parameter data indicates the instance price content, and is composed as follows:

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>data.price</td>
<td>Int</td>
<td>Price of instance (in 0.01 CNY)</td>
</tr>
</tbody>
</table>

### 4. Error Codes

The following error codes include the business logic error codes for this API.

<table>
<thead>
<tr>
<th>Error Code</th>
<th>Error Message</th>
<th>Error Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Error Code</td>
<td>Error Message</td>
<td>Error Description</td>
</tr>
<tr>
<td>------------</td>
<td>----------------------------</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>11050</td>
<td>InvalidParameter</td>
<td>Incorrect business parameter</td>
</tr>
<tr>
<td>11060</td>
<td>ServiceUnavailable</td>
<td>The service is unavailable in the requested zone currently</td>
</tr>
<tr>
<td>11071</td>
<td>UserNotInWhiteList</td>
<td>The user is not in the whitelist</td>
</tr>
<tr>
<td>11061</td>
<td>TypeldIllegal</td>
<td>Invalid typeld</td>
</tr>
<tr>
<td>11062</td>
<td>MemSizeExceedMaxLimit</td>
<td>The requested memory size exceeds the upper limit</td>
</tr>
<tr>
<td>11063</td>
<td>MemSizeIllegal</td>
<td>The requested memory size is not an integral multiple of 1024</td>
</tr>
<tr>
<td>11064</td>
<td>MemSizeNotInRange</td>
<td>The requested memory size is not in the supported range</td>
</tr>
<tr>
<td>11065</td>
<td>RequestSizeIllegal</td>
<td>The requested memory size or disk capacity is invalid. The memory size must be an integral multiple of 1024, and the disk capacity must be an integer</td>
</tr>
<tr>
<td>11066</td>
<td>DiskSizeNotInRange</td>
<td>The requested disk capacity is not in the supported range</td>
</tr>
<tr>
<td>11067</td>
<td>PeriodNotInRange</td>
<td>The requested period is not in the supported range. The value range is [1,2,3,4,5,6,7,8,9,10,11,12,24,36] (in month)</td>
</tr>
<tr>
<td>11072</td>
<td>SecondaryNumNotInRange</td>
<td>The number of slave nodes of replica set instance is not in the supported range. The value range is [1,2]</td>
</tr>
<tr>
<td>11056</td>
<td>InstanceNotExists</td>
<td>Instance does not exist</td>
</tr>
<tr>
<td>11051</td>
<td>InstanceDeleted</td>
<td>The instance has been reclaimed upon expiration</td>
</tr>
<tr>
<td>11068</td>
<td>UpgradeNotAllowedOnZoneId</td>
<td>Upgrade of instances is not allowed for this zone</td>
</tr>
<tr>
<td>11069</td>
<td>DiskSizeLessThanRealSize</td>
<td>The requested disk capacity is less than the actual value</td>
</tr>
<tr>
<td>11069</td>
<td>DiskSizeLessThanRealSize</td>
<td>The requested memory size is less than the actual value</td>
</tr>
</tbody>
</table>

5. Example

Input

```
&operation=newmongodb
&zoneId=100002
&typeId=GIO
&memory=8192
&diskSize=245
&secondaryNum=2
&version=MONGO_3_MMAP
&goodsNum=1
&period=1
```

Output
{
  "code": 0,
  "message": "",
  "codeDesc": "Success",
  "data": {
    "price": 188800
  }
}
Create Instance (Postpaid Plan)
Last updated : 2017-06-07 17:32:13

1. API Description

This API (CreateMongoDB) is used to create a replica set instance (annual or monthly plan).
Domain for API request: mongodb.api.qcloud.com

1. Please first use API Query Supported Instance Specifications (supporting custom availability zones and configurations) to query the supported instance specifications, and then use API Query Instance Price (Annual or Monthly Plan) to query the price of creatable instance;
2. Supported instance types: GIO: High IO; TGIO: High IO (10 GB);
3. Supported cloud database versions: MONGO_3_MMAP, MONGO_3_WT;
4. Value range of validity period of instance in a single creation: [1,2,3,4,5,6,7,8,9,10,11,12,24,36] (in month).

2. Input Parameters

The following request parameter list only provides API request parameters. Common request parameters are also needed when the API is called. For more information, please see Common Request Parameters page. The Action field for this API is CreateMongoDB.

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Required</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>zoneld</td>
<td>Yes</td>
<td>Int</td>
<td>Availability zone ID. You can use API Query Supported Instance Specifications to obtain the supported availability zones</td>
</tr>
<tr>
<td>typeId</td>
<td>Yes</td>
<td>String</td>
<td>Name of instance type. GIO: High IO; TGIO: High IO (10 GB)</td>
</tr>
<tr>
<td>memory</td>
<td>Yes</td>
<td>Int</td>
<td>Memory size of instance. Each memory value corresponds to a selectable disk capacity range (in MB)</td>
</tr>
<tr>
<td>diskSize</td>
<td>Yes</td>
<td>Int</td>
<td>Disk capacity of instance (in GB)</td>
</tr>
<tr>
<td>secondaryNum</td>
<td>Yes</td>
<td>Int</td>
<td>Number of slave nodes of replica set instance. Only 1 and 2 are supported currently</td>
</tr>
<tr>
<td>version</td>
<td>Yes</td>
<td>Int</td>
<td>Database version number, for example: MONGO_3_MMAP, MONGO_3_WT</td>
</tr>
<tr>
<td>goodsNum</td>
<td>Yes</td>
<td>Int</td>
<td>Number of instances purchased at a time</td>
</tr>
<tr>
<td>period</td>
<td>Yes</td>
<td>Int</td>
<td>Purchased usage period (in month). Value range: [1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 24, 36]</td>
</tr>
<tr>
<td>password</td>
<td>Yes</td>
<td>String</td>
<td>Password for the instance. Rule: It should be a combination of 8-16 characters comprised of at least two of the following types: letters, numbers, special characters (!, @, #, %, ^, ()</td>
</tr>
<tr>
<td>unVpcId</td>
<td>No</td>
<td>String</td>
<td>VPC ID. If it is left empty, the default is basic network. This value is subject to the unVpcId returned by API Query VPC List, such as: vpc-kd7d06of</td>
</tr>
<tr>
<td>unSubnetId</td>
<td>No</td>
<td>String</td>
<td>subnetId is invalid under basic network; Under VPC, the value is subject to the unSubnetId returned by the API Query Subnet List, such as subnet-3lizkspo</td>
</tr>
</tbody>
</table>
### 3. Output Parameters

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>code</td>
<td>Int</td>
<td>Common error code; 0: Succeeded; other values: Failed. For more information, please see Common Error Codes on the Error Codes page.</td>
</tr>
<tr>
<td>message</td>
<td>String</td>
<td>Error message description. A null value indicates a success</td>
</tr>
<tr>
<td>codeDesc</td>
<td>String</td>
<td>Description of error code at business side. For a successful operation, “Success” will be returned. In case of an error, a message describing the reason for the error will be returned.</td>
</tr>
<tr>
<td>data</td>
<td>Object</td>
<td>Returned order ID</td>
</tr>
</tbody>
</table>

Parameter data indicates the order ID, and is composed as follows:

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>data.dealId</td>
<td>String</td>
<td>Order ID. You can use API DescribeMongodbDealDetail to query order details</td>
</tr>
</tbody>
</table>

### 4. Error Codes

The following error codes include the business logic error codes for this API.

<table>
<thead>
<tr>
<th>Error Code</th>
<th>Error Message</th>
<th>Error Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>11050</td>
<td>InvalidParameter</td>
<td>Incorrect business parameter</td>
</tr>
<tr>
<td>11060</td>
<td>ServiceUnavailable</td>
<td>The service is unavailable in the requested zone currently</td>
</tr>
<tr>
<td>11071</td>
<td>UserNotInWhiteList</td>
<td>The user is not in the whitelist</td>
</tr>
<tr>
<td>11061</td>
<td>TypeldIllegal</td>
<td>Invalid typeld</td>
</tr>
<tr>
<td>11062</td>
<td>MemSizeExceedMaxLimit</td>
<td>The requested memory size exceeds the upper limit</td>
</tr>
<tr>
<td>11063</td>
<td>MemSizeIllegal</td>
<td>The requested memory size is not an integral multiple of 1024</td>
</tr>
<tr>
<td>11064</td>
<td>MemSizeNotInRange</td>
<td>The requested memory size is not in the supported range</td>
</tr>
<tr>
<td>11065</td>
<td>RequestSizeIllegal</td>
<td>The requested memory size or disk capacity is invalid. The memory size must be an integral multiple of 1024, and the disk capacity must be an integer</td>
</tr>
<tr>
<td>11066</td>
<td>DiskSizeNotInRange</td>
<td>The requested disk capacity is not in the supported range</td>
</tr>
<tr>
<td>Error Code</td>
<td>Error Message</td>
<td>Error Description</td>
</tr>
<tr>
<td>------------</td>
<td>-------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>11067</td>
<td>PeriodNotInRange</td>
<td>The requested period is not in the supported range. The value range is [1,2,3,4,5,6,7,8,9,10,11,12,24,36] (in month)</td>
</tr>
<tr>
<td>11072</td>
<td>SecondaryNumNotInRange</td>
<td>The number of slave nodes of replica set instance is not in the supported range. The value range is [1,2]</td>
</tr>
<tr>
<td>11059</td>
<td>PasswordRuleError</td>
<td>Incorrect password rule. The password must be a combination of 8-16 characters comprised of at least two of the following types: letters, numbers and special characters (!, @, #, %, ^, *, ()).</td>
</tr>
<tr>
<td>100207</td>
<td>OperationConstraintsAccountBalanceNotEnough</td>
<td>Insufficient account balance. Please top it up</td>
</tr>
<tr>
<td>11075</td>
<td>UnVpcIdNotExists</td>
<td>unVpcId does not exist</td>
</tr>
<tr>
<td>11076</td>
<td>UnSubnetIdNotExists</td>
<td>unSubnetId does not exist</td>
</tr>
</tbody>
</table>

5. Example

Input

```plaintext
&<common request parameters>
&zoneId=100002
&typeId=GIO
&memory=4096
&diskSize=30
&secondaryNum=2
&version=MONGO_3_MMAP
&goodsNum=1
&period=1
&password=49A2d!e@f12e
```

Output

```json
{
  "code": 0,
  "message": "",
  "codeDesc": "Success",
  "data": {
    "dealId": "3373037"
  }
}
```
Renew Instance (Postpaid Plan)

Last updated: 2017-05-03 14:35:44

1. API Description

This API (RenewMongoDB) is used to renew a replica set instance (annual or monthly plan). Please make sure your account balance is sufficient.
Domain for API request: mongodb.api.qcloud.com

2. Input Parameters

The following request parameter list only provides API request parameters. Common request parameters are also needed when the API is called. For more information, please see Common Request Parameters page. The Action field for this API is RenewMongoDB.

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Required</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>instanceId</td>
<td>Yes</td>
<td>String</td>
<td>ID of instance to work with. This can be obtained from instanceId in the returned values of API DescribeMongoDBInstances.</td>
</tr>
<tr>
<td>period</td>
<td>Yes</td>
<td>Int</td>
<td>Renewed usage period (in month). Value range: [1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 24, 36]</td>
</tr>
</tbody>
</table>

3. Output Parameters

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>code</td>
<td>Int</td>
<td>Common error code; 0: Succeeded; other values: Failed. For more information, please see Common Error Codes on the Error Codes page.</td>
</tr>
<tr>
<td>message</td>
<td>String</td>
<td>Error message description. A null value indicates a success</td>
</tr>
<tr>
<td>codeDesc</td>
<td>String</td>
<td>Description of error code at business side. For a successful operation, “Success” will be returned. In case of an error, a message describing the reason for the error will be returned.</td>
</tr>
<tr>
<td>data</td>
<td>Object</td>
<td>Returned order ID</td>
</tr>
</tbody>
</table>

Parameter data indicates the order ID, and is composed as follows:

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>data.dealId</td>
<td>String</td>
<td>Order ID. You can use API DescribeMongodbDealDetail to query order details</td>
</tr>
</tbody>
</table>

4. Error Codes

The following error codes include the business logic error codes for this API.
<table>
<thead>
<tr>
<th>Error Code</th>
<th>Error Message</th>
<th>Error Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>11050</td>
<td>InvalidParameter</td>
<td>Incorrect business parameter</td>
</tr>
<tr>
<td>11056</td>
<td>InstanceNotExists</td>
<td>Instance does not exist</td>
</tr>
<tr>
<td>11051</td>
<td>InstanceDeleted</td>
<td>The instance has been reclaimed upon expiration</td>
</tr>
<tr>
<td>11067</td>
<td>PeriodNotInRange</td>
<td>The requested period is not in the supported range</td>
</tr>
<tr>
<td>100207</td>
<td>OperationConstraints.AccountBalanceNotEnough</td>
<td>Insufficient account balance. Please top it up</td>
</tr>
</tbody>
</table>

5. Example

Input

```plaintext
&Common Request Parameters>
&instanceId=cmgo-6ozqe0uh
&period=1
```

Output

```json
{
  "code": "0",
  "message": "",
  "codeDesc": "Success",
  "data": {
    "dealId": "3374462"
  }
}
```
Upgrade Instance (Postpaid Plan)

Last updated: 2017-05-03 14:35:33

1. API Description

This API (UpgradeMongoDB) is used to upgrade a replica set instance (annual or monthly plan). Please make sure your account balance is sufficient.
Domain for API request: mongodb.api.qcloud.com

2. Input Parameters

The following request parameter list only provides API request parameters. Common request parameters are also needed when the API is called. For more information, please see Common Request Parameters page. The Action field for this API is UpgradeMongoDB.

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Required</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>instanceId</td>
<td>Yes</td>
<td>String</td>
<td>ID of instance to work with. This can be obtained from instanceId in the returned values of API DescribeMongoDBInstances.</td>
</tr>
<tr>
<td>memory</td>
<td>Int</td>
<td>Memory size of upgraded instance. Each memory value corresponds to a selectable disk capacity range (in MB)</td>
<td></td>
</tr>
<tr>
<td>diskSize</td>
<td>Yes</td>
<td>Int</td>
<td>Disk capacity of upgraded instance (in GB)</td>
</tr>
</tbody>
</table>

3. Output Parameters

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>code</td>
<td>Int</td>
<td>Common error code; 0: Succeeded; other values: Failed. For more information, please see Common Error Codes on the Error Codes page.</td>
</tr>
<tr>
<td>message</td>
<td>String</td>
<td>Error message description. A null value indicates a success</td>
</tr>
<tr>
<td>codeDesc</td>
<td>String</td>
<td>Description of error code at business side. For a successful operation, &quot;Success&quot; will be returned. In case of an error, a message describing the reason for the error will be returned.</td>
</tr>
<tr>
<td>data</td>
<td>Array</td>
<td>Returned order ID</td>
</tr>
</tbody>
</table>

Parameter data indicates the order ID, and is composed as follows:

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>data.dealId</td>
<td>String</td>
<td>Order ID. You can use API DescribeMongodbDealDetail to query order details</td>
</tr>
</tbody>
</table>
4. Error Codes

The following error codes include the business logic error codes for this API.

<table>
<thead>
<tr>
<th>Error Code</th>
<th>Error Message</th>
<th>Error Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>11050</td>
<td>InvalidParameter</td>
<td>Incorrect business parameter</td>
</tr>
<tr>
<td>11056</td>
<td>InstanceNotExists</td>
<td>Instance does not exist</td>
</tr>
<tr>
<td>11051</td>
<td>InstanceDeleted</td>
<td>The instance has been reclaimed upon expiration</td>
</tr>
<tr>
<td>11068</td>
<td>UpgradeNotAllowedOnZoneId</td>
<td>Upgrade of instances is not allowed for this zone</td>
</tr>
<tr>
<td>11069</td>
<td>DiskSizeLessThanRealSize</td>
<td>The requested disk capacity is less than the actual value</td>
</tr>
<tr>
<td>11070</td>
<td>DiskSizeLessThanRealSize</td>
<td>The requested memory size is less than the actual value</td>
</tr>
<tr>
<td>100207</td>
<td>OperationConstraints.AccountBalanceNotEnough</td>
<td>Insufficient account balance. Please top it up</td>
</tr>
</tbody>
</table>

5. Example

Input

&<Common Request Parameters>
&instanceId=cmgo-6ozqe0uh
&memory=8192
&diskSize=60

Output

```json
{
  "code": "0",
  "message": "",
  "codeDesc": "Success",
  "data": {
    "dealId": "432587"
  }
}
```
Querying Order Details

Last updated: 2019-09-18 15:28:03

1. API Description

This API (DescribeMongodbDealDetail) is used to query order details.
API domain name: mongodb.api.qcloud.com.

2. Input Parameters

Below is a list of API request parameters. You need to add common request parameters to your request when calling this API. For more information, see Common Request Parameters. The Action field of this API is DescribeMongodbDealDetail.

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Required</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>dealIds.n</td>
<td>Yes</td>
<td>String</td>
<td>The array of order IDs, with the array subscript starting at 0</td>
</tr>
</tbody>
</table>

3. Output Parameters

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>code</td>
<td>Int</td>
<td>Common error code. 0: success; other values: failure. For more information, see Common Error Codes.</td>
</tr>
<tr>
<td>message</td>
<td>String</td>
<td>Error message. A null value indicates a success</td>
</tr>
<tr>
<td>codeDesc</td>
<td>String</td>
<td>Description of the action status. When the action has succeeded, &quot;Success&quot; is returned. When the action has failed, a message describing the cause of the error is returned.</td>
</tr>
<tr>
<td>details</td>
<td>Array</td>
<td>Array of returned order details</td>
</tr>
</tbody>
</table>

`details` indicates the array of order details and is composed as follows:

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>details.dealId</td>
<td>String</td>
<td>Short order ID. Use this ID when calling the TencentCloud API</td>
</tr>
<tr>
<td>details.dealName</td>
<td>String</td>
<td>Long order ID. Use this ID when reporting order-related problems to customer service</td>
</tr>
<tr>
<td>details.zoneld</td>
<td>Int</td>
<td>Availability Zone ID</td>
</tr>
<tr>
<td>details.goodsNum</td>
<td>Int</td>
<td>Number of instances associated with the order</td>
</tr>
<tr>
<td>details.creater</td>
<td>String</td>
<td>The UIN of the order creator</td>
</tr>
<tr>
<td>details.creatTime</td>
<td>String</td>
<td>Order creation time</td>
</tr>
<tr>
<td>details.overdueTime</td>
<td>String</td>
<td>Order expiration time</td>
</tr>
<tr>
<td>details.endTime</td>
<td>String</td>
<td>The completion time of the order</td>
</tr>
</tbody>
</table>
### Parameter Name | Type | Description
--- | --- | ---
**details.status** | Int | The status of the order.  
1: unpaid;  
2: paid but not shipped;  
3: in transition;  
4: successfully shipped;  
5: shipment failed;  
6: refunded;  
7: order closed;  
8: order expired;  
9: order invalidated;  
10: product invalidated;  
11: requested payment rejected;  
12: payment in process
**details.price** | Int | The actual total price of the order in 0.01 USD
**details.goodsDetail** | Object | Details of the items associated with the order

**goodsDetail** returned upon instance creation:

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>memSize</td>
<td>int</td>
<td>The memory size of the instance in MB</td>
</tr>
<tr>
<td>disksize</td>
<td>int</td>
<td>The disk capacity of the instance in GB</td>
</tr>
<tr>
<td>typeId</td>
<td>String</td>
<td>The type name of the instance. GIO: high-IO edition; TGIO: 10-Gigabit high-IO edition</td>
</tr>
<tr>
<td>clusterType</td>
<td>Array</td>
<td>The cluster type of the instance. 0: replica set</td>
</tr>
<tr>
<td>secondaryNum</td>
<td>Array</td>
<td>Number of slave nodes of the replica set instance. Only 1 and 2 are currently supported</td>
</tr>
<tr>
<td>zoneId</td>
<td>Array</td>
<td>Availability Zone ID</td>
</tr>
<tr>
<td>mongoVersion</td>
<td>Array</td>
<td>Database version number, for example: MONGO_3_MMAP, MONGO_3_WT</td>
</tr>
<tr>
<td>timeSpan</td>
<td>Array</td>
<td>The validity period of the instance, with the unit being subject to the return value of timeUnit</td>
</tr>
<tr>
<td>timeUnit</td>
<td>Array</td>
<td>The unit of the validity period of the instance, m: month; d: day</td>
</tr>
<tr>
<td>SerialIds</td>
<td>Array</td>
<td>The array of instance IDs</td>
</tr>
</tbody>
</table>

**goodsDetail** returned when the instance is renewed:

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>curDeadline</td>
<td>String</td>
<td>The expiration time of the instance before renewal</td>
</tr>
<tr>
<td>timeSpan</td>
<td>int</td>
<td>Renewed period, with the unit being subject to the return value of timeUnit</td>
</tr>
<tr>
<td>timeUnit</td>
<td>String</td>
<td>The unit of the renewed period, m: month; d: day</td>
</tr>
<tr>
<td>SerialIds</td>
<td>Array</td>
<td>The array of instance IDs</td>
</tr>
</tbody>
</table>

**goodsDetail** returned when the instance is upgraded:
<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>curDeadline</td>
<td>String</td>
<td>Instance expiration time</td>
</tr>
<tr>
<td>newMemsize</td>
<td>int</td>
<td>The memory size of the instance after upgrade in MB</td>
</tr>
<tr>
<td>newDisksize</td>
<td>int</td>
<td>The disk capacity of the instance after upgrade in GB</td>
</tr>
<tr>
<td>oldMemsize</td>
<td>int</td>
<td>The memory size of the instance before upgrade in MB</td>
</tr>
<tr>
<td>oldDisksize</td>
<td>int</td>
<td>The disk capacity of the instance before upgrade in GB</td>
</tr>
<tr>
<td>SerialIds</td>
<td>Array</td>
<td>The array of instance IDs</td>
</tr>
</tbody>
</table>

4. Error Codes

The following lists the error codes related to this API.

<table>
<thead>
<tr>
<th>Error Code</th>
<th>Error Message</th>
<th>Error Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>11201</td>
<td>InvalidParameter</td>
<td>Invalid service parameter.</td>
</tr>
</tbody>
</table>

5. Samples

Input

```
&Common request parameter>
&dealIds.0=3373037
&dealIds.1=3374462
&dealIds.2=3374558
```

Output

```
{
"code": 0,
"message": "",
"codeDesc": "Success",
"details": [
{
"dealId": "3373037",
"dealName": "20170206121420",
"zonedId": 100002,
"goodsNum": 1,
"creater": "3374998458",
"createtime": "2017-02-06 14:07:46",
"overdueTime": "2017-02-21 14:07:46",
"endTime": "2017-02-06 14:11:54",
"status": 4,
"price": 72200,
"goodsDetail": {
"memSize": 4096,
"disksize": 30,
```
"tyepId": "GIO",
"clusterType": "ReplSet",
"secondaryNum": 2,
"zonelId": 100002,
"mongoVersion": "MONGO_3_MMAP",
"timeSpan": 1,
"timeUnit": "m",
"SerialIds": [
"cmgo-6ozqe0uh"
]
},
{"dealId": "3374462",
"dealName": "20170206124372",
"zonelId": 100002,
"goodsNum": 1,
"creater": "3374998458",
"creatTime": "2017-02-06 16:32:45",
"overdueTime": "2017-02-21 16:32:45",
"endTime": "2017-02-06 16:32:46",
"status": 4,
"price": 72200,
"goodsDetail": {
"curDeadline": "2017-03-06 14:07:46",
"timeSpan": 1,
"timeUnit": "m",
"SerialIds": [
"cmgo-6ozqe0uh"
]
}
},
{"dealId": "3374558",
"dealName": "20170206124575",
"zonelId": 100002,
"goodsNum": 1,
"creater": "3374998458",
"creatTime": "2017-02-06 16:43:17",
"overdueTime": "2017-02-21 16:43:17",
"endTime": "2017-02-06 16:45:49",
"status": 4,
"price": 142421,
"goodsDetail": {
"curDeadline": "2017-04-06 14:07:46",
"newMemsize": 8192,
"newDisksize": 60,
"oldMemsize": 4096,
"oldDisksize": 30,
"SerialIds": [
"cmgo-6ozqe0uh"
]
}
}
# Query Instance List

Last updated: 2017-05-03 14:35:09

## 1. API Description

This API (DescribeMongoDBInstances) is used to query the list of replica set instances.  
Domain for API request: mongodb.api.qcloud.com

## 2. Input Parameters

The following request parameter list only provides API request parameters. Common request parameters are also needed when the API is called. For more information, please see Common Request Parameters page. The Action field for this API is DescribeMongoDBInstances.

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Required</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>limit</td>
<td>Yes</td>
<td>Int</td>
<td>Length of a page. Maximum is 100</td>
</tr>
<tr>
<td>offset</td>
<td>Yes</td>
<td>Int</td>
<td>Current page number. Default is 0. For query APIs, a maximum number of returned records is generally set for a single query by default. To traverse all the resources, you need to use &quot;limit&quot; and &quot;offset&quot; for a paged query; For example, to query the 40 records between 110 and 149, you can set offset = 110 and limit = 40.</td>
</tr>
<tr>
<td>instanceIds</td>
<td>No</td>
<td>Array</td>
<td>One or more instance IDs (n represents array subscript starting with 0).</td>
</tr>
<tr>
<td>projectIds</td>
<td>No</td>
<td>Array</td>
<td>One or more project IDs (n represents array subscript starting with 0).</td>
</tr>
<tr>
<td>vips</td>
<td>No</td>
<td>Array</td>
<td>One or more virtual IPs (n represents array subscript starting with 0).</td>
</tr>
<tr>
<td>status</td>
<td>No</td>
<td>Array</td>
<td>One or more statuses (n represents array subscript starting with 0). Current status of instance. 0: To be initialized; 1: In process; 2: Running; -2: Isolated</td>
</tr>
<tr>
<td>instanceNames</td>
<td>No</td>
<td>Array</td>
<td>One or more instance names (n represents array subscript starting with 0).</td>
</tr>
<tr>
<td>vpcId</td>
<td>No</td>
<td>Int</td>
<td>This parameter is retained for historical reasons. It is recommended to use the following parameter unVpcId (VPC ID).</td>
</tr>
<tr>
<td>subnetId</td>
<td>No</td>
<td>Int</td>
<td>This parameter is retained for historical reasons. It is recommended to use the following parameter unSubnetId (Subnet ID under VPC).</td>
</tr>
<tr>
<td>unVpcId</td>
<td>No</td>
<td>String</td>
<td>VPC ID. If it is left empty, the default is basic network. This value is subject to the unVpcId returned by API Query VPC List, such as: vpc-kd7d060f</td>
</tr>
<tr>
<td>unSubnetId</td>
<td>No</td>
<td>String</td>
<td>Subnet ID. Under VPC, the value is subject to the unSubnetId returned by the API Query Subnet List, such as subnet-3lzrkspo</td>
</tr>
</tbody>
</table>

## 3. Output Parameters
<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>code</td>
<td>Int</td>
<td>Common error code; 0: Succeeded; other values: Failed. For more information, please see <a href="#">Common Error Codes</a> on the Error Codes page.</td>
</tr>
<tr>
<td>message</td>
<td>String</td>
<td>Error message description. A null value indicates a success</td>
</tr>
<tr>
<td>codeDesc</td>
<td>String</td>
<td>Description of error code at business side. For a successful operation, &quot;Success&quot; will be returned. In case of an error, a message describing the reason for the error will be returned.</td>
</tr>
<tr>
<td>totalCount</td>
<td>Int</td>
<td>Total number of instances</td>
</tr>
<tr>
<td>data</td>
<td>Object</td>
<td>Details of instance list</td>
</tr>
</tbody>
</table>

Parameter `data` indicates the details of instance list, and is composed as follows:

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>data.mongodbSet</code></td>
<td>Array</td>
<td>An array of instance details</td>
</tr>
</tbody>
</table>

Parameter `mongodbSet` indicates an array of instance details, and is composed as follows:

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>zoneId</td>
<td>Int</td>
<td>Availability zone ID</td>
</tr>
<tr>
<td>instanceId</td>
<td>String</td>
<td>Instance ID</td>
</tr>
<tr>
<td>instanceName</td>
<td>String</td>
<td>Instance name</td>
</tr>
<tr>
<td>projectId</td>
<td>Int</td>
<td>ID of project to which the instance belongs</td>
</tr>
<tr>
<td>vpcId</td>
<td>Int</td>
<td>VPC ID (not recommended)</td>
</tr>
<tr>
<td>unVpcId</td>
<td>String</td>
<td>VPC ID (recommended)</td>
</tr>
<tr>
<td>subnetId</td>
<td>Int</td>
<td>Subnet ID under VPC (not recommended)</td>
</tr>
<tr>
<td>unSubnetId</td>
<td>String</td>
<td>Subnet ID under VPC (recommended)</td>
</tr>
<tr>
<td>status</td>
<td>Int</td>
<td>Current status of instance. 0: To be initialized; 1: In process; 2: Running; -2: Isolated</td>
</tr>
<tr>
<td>statusDesc</td>
<td>String</td>
<td>Description of instance status</td>
</tr>
<tr>
<td>vip</td>
<td>Int</td>
<td>Virtual IP of instance</td>
</tr>
<tr>
<td>vport</td>
<td>Int</td>
<td>Port number of instance</td>
</tr>
<tr>
<td>createtime</td>
<td>String</td>
<td>Creation time of instance</td>
</tr>
<tr>
<td>deadline</td>
<td>String</td>
<td>Expiration time of instance</td>
</tr>
<tr>
<td>Parameter Name</td>
<td>Type</td>
<td>Description</td>
</tr>
<tr>
<td>------------------</td>
<td>----------</td>
<td>-------------------------------------------------</td>
</tr>
<tr>
<td>typeId</td>
<td>String</td>
<td>Name of instance type</td>
</tr>
<tr>
<td>version</td>
<td>String</td>
<td>Database version number, for example: MONGO_3_MMAP, MONGO_3_WT</td>
</tr>
<tr>
<td>memSize</td>
<td>Int</td>
<td>Memory size of instance (in MB)</td>
</tr>
<tr>
<td>diskSize</td>
<td>Int</td>
<td>Disk capacity of instance (in GB)</td>
</tr>
<tr>
<td>diskusedCapacity</td>
<td>Int</td>
<td>Actually used capacity of disk of instance (in MB)</td>
</tr>
<tr>
<td>nodenum</td>
<td>Int</td>
<td>Number of nodes of replica set</td>
</tr>
<tr>
<td>autoRenewFlag</td>
<td>Int</td>
<td>Auto renewal flag set for the instance: 0 - Do not set auto renewal; a notification will be given upon expiration of instance; 1 - Set auto renewal; instance will be automatically renewed upon expiration; 2 - Neither renewal nor notification will be made upon the expiration of instance</td>
</tr>
</tbody>
</table>

4. Error Codes

The following error codes include the business logic error codes for this API.

<table>
<thead>
<tr>
<th>Error Code</th>
<th>Error Message</th>
<th>Error Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>11050</td>
<td>InvalidParameter</td>
<td>Incorrect business parameter</td>
</tr>
</tbody>
</table>

5. Example

&<Common Request Parameters>
&limit=10
&offset=0

The returned results are as below:

```json
{
   "code": 0,
   "message": "",
   "codeDesc": "Success",
   "totalCount": 10,
   "data": {
      "mongodbSet": [
         {
            "zoneId": 300001,
```
<table>
<thead>
<tr>
<th>instanceId</th>
<th>instanceName</th>
<th>projectId</th>
<th>vpcId</th>
<th>unVpcId</th>
<th>subnetId</th>
<th>unSubnetId</th>
<th>status</th>
<th>statusDesc</th>
<th>vip</th>
<th>vport</th>
<th>createtime</th>
<th>deadline</th>
<th>typeId</th>
<th>version</th>
<th>memSize</th>
<th>diskSize</th>
<th>diskusedCapacity</th>
<th>nodenum</th>
<th>autoRenewFlag</th>
</tr>
</thead>
<tbody>
<tr>
<td>cmgo-mmifbo25</td>
<td>cmgo-mmifbo25</td>
<td>0</td>
<td>0</td>
<td>null</td>
<td>0</td>
<td>null</td>
<td>2</td>
<td>Running</td>
<td>10.66.187.159</td>
<td>27017</td>
<td>2016-11-09 10:54:47</td>
<td>2016-12-09 10:54:47</td>
<td>&quot;GIO&quot;</td>
<td>&quot;MONGO_3_MMAP&quot;</td>
<td>2048</td>
<td>30</td>
<td>3398</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>cmgo-mmifbo25</td>
<td>cmgo-mmifbo25</td>
<td>0</td>
<td>0</td>
<td>null</td>
<td>0</td>
<td>null</td>
<td>2</td>
<td>Running</td>
<td>10.66.194.3</td>
<td>27017</td>
<td>2016-12-23 19:19:27</td>
<td>2017-02-23 19:19:27</td>
<td>&quot;CY&quot;</td>
<td>&quot;MONGO_3_MMAP&quot;</td>
<td>4096</td>
<td>60</td>
<td>8476</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>cmgo-mmifbo25</td>
<td>cmgo-mmifbo25</td>
<td>0</td>
<td>0</td>
<td>null</td>
<td>0</td>
<td>null</td>
<td>2</td>
<td>Running</td>
<td>10.66.168.6</td>
<td>27017</td>
<td>2016-12-09 10:54:47</td>
<td>2016-12-09 10:54:47</td>
<td>&quot;GIO&quot;</td>
<td>&quot;MONGO_3_MMAP&quot;</td>
<td>2048</td>
<td>30</td>
<td>3398</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>
"vport": 27017,
"createtime": "2017-02-06 14:07:46",
"deadline": "2017-04-06 14:07:46",
"typeld": "GIO",
"version": "MONGO_3_MMAP",
"memSize": 8192,
"diskSize": 60,
"diskusedCapacity": 6206,
"nodenum": 3,
"autoRenewFlag": 1
}
Set Auto-Renewal

Last updated: 2017-05-03 14:34:57

1. API Description

This API (SetMongoDBAutoRenew) is used to set auto renewal for an instance.
Domain for API request: mongodb.api.qcloud.com

2. Input Parameters

The following request parameter list only provides API request parameters. Common request parameters are also needed when the API is called. For more information, please see Common Request Parameters page. The Action field for this API is SetMongoDBAutoRenew.

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Required</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>instanceIds.n</td>
<td>Yes</td>
<td>String</td>
<td>One or more instance IDs (n represents array subscript starting with 0). This can be obtained from instanceId in the returned values of API DescribeMongoDBInstances.</td>
</tr>
<tr>
<td>isAutoRenew</td>
<td>Yes</td>
<td>Int</td>
<td>Set auto renewal flag: 0 - Do not set auto renewal; a notification will be given upon expiration of instance; 1 - Set auto renewal; instance will be automatically renewed upon expiration; 2 - Neither renewal nor notification will be made upon the expiration of instance</td>
</tr>
</tbody>
</table>

3. Output Parameters

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>code</td>
<td>Int</td>
<td>Common error code; 0: Succeeded; other values: Failed. For more information, please see Common Error Codes on the Error Codes page.</td>
</tr>
<tr>
<td>message</td>
<td>String</td>
<td>Error message description. A null value indicates a success</td>
</tr>
<tr>
<td>codeDesc</td>
<td>String</td>
<td>Description of error code at business side. For a successful operation, &quot;Success&quot; will be returned. In case of an error, a message describing the reason for the error will be returned.</td>
</tr>
</tbody>
</table>

4. Error Codes

The following error codes include the business logic error codes for this API.

<table>
<thead>
<tr>
<th>Error Code</th>
<th>Error Message</th>
<th>Error Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>11050</td>
<td>InvalidParameter</td>
<td>Incorrect business parameter</td>
</tr>
<tr>
<td>10716</td>
<td>NoInstanceIds</td>
<td>Array of requested instance IDs is empty</td>
</tr>
<tr>
<td>Error Code</td>
<td>Error Message</td>
<td>Error Description</td>
</tr>
<tr>
<td>------------</td>
<td>----------------</td>
<td>----------------------------------------</td>
</tr>
<tr>
<td>11056</td>
<td>InstanceNotExists</td>
<td>Instance does not exist</td>
</tr>
<tr>
<td>11051</td>
<td>InstanceDeleted</td>
<td>The instance has been reclaimed upon expiration</td>
</tr>
</tbody>
</table>

5. Example

Input

```plaintext
&<Common Request Parameters>
&instanceIds.0=cmgo-6ozqe0uh
&isAutoRenew=1
```

Output

```json
{
  "code": 0,
  "message": "",
  "codeDesc": "Success"
}
```
1. API Description

This API (ResetMongoDBPassword) is used to reset the password for an instance.
API domain name: mongodb.api.qcloud.com.
Password rule: It can only contain 8-16 characters and must contain at least two of the following types of characters: letters, digits, and special characters (!@#%^()).

2. Input Parameters

Below is a list of API request parameters. You need to add common request parameters to your request when calling this API. For more information, see Common Request Parameters. The Action field of this API is ResetMongoDBPassword.

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Required</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>instanceId</td>
<td>Yes</td>
<td>String</td>
<td>The ID of the instance to be operated on, which can be obtained from the</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>instanceId field in the return value of the DescribeMongoDBInstances API.</td>
</tr>
<tr>
<td>password</td>
<td>Yes</td>
<td>String</td>
<td>The new password for the instance. It can only contain 8-16 characters and</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>must contain at least two of the following types of characters: letters,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>digits, and special characters (!@#%^()).</td>
</tr>
</tbody>
</table>

3. Output Parameters

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>code</td>
<td>Int</td>
<td>Common error code. 0: success; other values: failure. For more information,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>see Common Error Codes.</td>
</tr>
<tr>
<td>message</td>
<td>String</td>
<td>Error message. A null value indicates a success</td>
</tr>
<tr>
<td>codeDesc</td>
<td>String</td>
<td>Description of the action status. When the action has succeeded, &quot;Success&quot;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>is returned. When the action has failed, a message describing the cause of</td>
</tr>
<tr>
<td></td>
<td></td>
<td>the error is returned.</td>
</tr>
<tr>
<td>data</td>
<td>Object</td>
<td>The ID of the task</td>
</tr>
</tbody>
</table>

data indicates the ID of the task and is composed as follows:

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>datajobId</td>
<td>Int</td>
<td>The ID of the task, which can be used to query the task execution condition</td>
</tr>
<tr>
<td></td>
<td></td>
<td>through the GetMongoDBJobInfo API</td>
</tr>
</tbody>
</table>
4. Error Codes

The following lists the error codes related to this API.

<table>
<thead>
<tr>
<th>Error Code</th>
<th>Error Message</th>
<th>Error Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>11050</td>
<td>InvalidParameter</td>
<td>Invalid service parameter.</td>
</tr>
<tr>
<td>11056</td>
<td>InstanceNotExists</td>
<td>No corresponding instance was found.</td>
</tr>
<tr>
<td>11057</td>
<td>InstanceBeenLocked</td>
<td>Unable to execute operation because the instance is locked by another process.</td>
</tr>
<tr>
<td>10702</td>
<td>InstanceStatusAbnormal</td>
<td>Unable to execute operation due to an abnormal instance status. For example, the instance's status is &quot;in process&quot; or &quot;isolated&quot; or &quot;deleted&quot;</td>
</tr>
<tr>
<td>11059</td>
<td>PasswordRuleError</td>
<td>Password rule error. Passwords can only contain 8-16 characters and must contain at least two of the following types of characters: letters, digits, and special characters (@#%^*())</td>
</tr>
</tbody>
</table>

5. Samples

&<Common request parameter>
&instanceId=cmgo-6ozqe0uh
&password=12D3E@!r5ed

Below is a sample return:

```json
{
    "code": 0,
    "message": "",
    "codeDesc": "Success",
    "data": {
        "jobId": 73605
    }
}
```
Renaming Projects

Last updated: 2019-09-19 17:16:45

1. API Description

This API (ModifyMongoDBProject) is used to modify the project to which an instance belongs.
API domain name: mongodb.api.qcloud.com.

2. Input Parameters

Below is a list of API request parameters. You need to add common request parameters to your request when calling this API. For more information, see Common Request Parameters. The Action field of this API is ModifyMongoDBProject.

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Required</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>instanceIds.n</td>
<td>No</td>
<td>String</td>
<td>One or more instance IDs. n represents an array subscript starting from 0. Instance ID can be obtained from the instanceld field in the return value of the DescribeMongoDBInstances API.</td>
</tr>
<tr>
<td>projectId</td>
<td>Yes</td>
<td>Int</td>
<td>Project ID. The value is subject to the projectld returned by User Account &gt; User Account API Query &gt; Project List</td>
</tr>
</tbody>
</table>

3. Output Parameters

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>code</td>
<td>Int</td>
<td>Common error code. 0: success; other values: failure. For more information, see Common Error Codes.</td>
</tr>
<tr>
<td>message</td>
<td>String</td>
<td>Error message. A null value indicates a success</td>
</tr>
<tr>
<td>codeDesc</td>
<td>String</td>
<td>Description of the action status. When the action has succeeded, &quot;Success&quot; is returned. When the action has failed, a message describing the cause of the error is returned.</td>
</tr>
</tbody>
</table>

4. Error Codes

The following lists the error codes related to this API.

<table>
<thead>
<tr>
<th>Error Code</th>
<th>Error Message</th>
<th>Error Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>11050</td>
<td>InvalidParameter</td>
<td>Invalid service parameter.</td>
</tr>
<tr>
<td>11056</td>
<td>InstanceNotExists</td>
<td>No corresponding instance was found.</td>
</tr>
<tr>
<td>11057</td>
<td>InstanceBeenLocked</td>
<td>Unable to execute operation because the instance is locked by another process.</td>
</tr>
</tbody>
</table>
### Error Codes

<table>
<thead>
<tr>
<th>Error Code</th>
<th>Error Message</th>
<th>Error Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>10702</td>
<td>InstanceStatusAbnormal</td>
<td>Unable to execute operation due to an abnormal instance status. For example, the</td>
</tr>
<tr>
<td></td>
<td></td>
<td>instance's status is &quot;in process&quot; or &quot;isolated&quot; or &quot;deleted&quot;</td>
</tr>
</tbody>
</table>

### 5. Samples

```python
&<Common request parameter>
&instanceIds.0=cmgo-6ozqe0uh
&projectIds=1001
```

Below is a sample return:

```json
{
  "code": 0,
  "message": "",
  "codeDesc": "Success"
}
```
Renaming Instances

Last updated: 2019-09-18 15:28:51

1. API Description

This API (ModifyMongoDBName) is used to rename an instance.
API domain name: mongodb.api.qcloud.com.
Instance name rule: It can contain 1-36 letters, digits, English punctuation marks, _, or -

2. Input Parameters

Below is a list of API request parameters. You need to add common request parameters to your request when calling this API. For more information, see Common Request Parameters. The Action field of this API is ModifyMongoDBName.

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Required</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>instanceId</td>
<td>Yes</td>
<td>String</td>
<td>The ID of the instance to be operated on, which can be obtained from the instanceId field in the return value of the DescribeMongoDBInstances API.</td>
</tr>
<tr>
<td>instanceName</td>
<td>Yes</td>
<td>String</td>
<td>The name of the instance. It can contain 1-36 letters, digits, English punctuation marks, _, or -</td>
</tr>
</tbody>
</table>

3. Output Parameters

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>code</td>
<td>Int</td>
<td>Common error code. 0: success; other values: failure. For more information, see Common Error Codes.</td>
</tr>
<tr>
<td>message</td>
<td>String</td>
<td>Error message. A null value indicates a success</td>
</tr>
<tr>
<td>codeDesc</td>
<td>String</td>
<td>Description of the action status. When the action has succeeded, &quot;Success&quot; is returned. When the action has failed, a message describing the cause of the error is returned.</td>
</tr>
</tbody>
</table>

4. Error Codes

The following lists the error codes related to this API.

<table>
<thead>
<tr>
<th>Error Code</th>
<th>Error Message</th>
<th>Error Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>11050</td>
<td>InvalidParameter</td>
<td>Invalid service parameter.</td>
</tr>
<tr>
<td>11056</td>
<td>InstanceNotExists</td>
<td>No corresponding instance was found.</td>
</tr>
<tr>
<td>11051</td>
<td>InstanceDeleted</td>
<td>The instance has been repossessed upon expiration.</td>
</tr>
<tr>
<td>Error Code</td>
<td>Error Message</td>
<td>Error Description</td>
</tr>
<tr>
<td>------------</td>
<td>-----------------------------</td>
<td>-----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>11052</td>
<td>InstanceIsolated</td>
<td>The instance has been isolated upon expiration.</td>
</tr>
<tr>
<td>11054</td>
<td>InstanceNameExceedMaxLimit</td>
<td>The instance name length exceeds the upper limit.</td>
</tr>
<tr>
<td>11055</td>
<td>InstanceNameRuleError</td>
<td>The instance name is in the incorrect format. It can only contain 1-36 letters,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>digits, English punctuation marks, _, or -</td>
</tr>
</tbody>
</table>

5. Samples

&<Common request parameter>
&instanceId=cmgo-6ozqe0uh
&instanceName=test_API

Below is a sample return:

```json
{
  "code": 0,
  "message": "",
  "codeDesc": "Success"
}
```
1. API Description

This API (GetMongoDBJobInfo) is used to query the execution status of a task.
API domain name: mongodb.api.qcloud.com.

2. Input Parameters

Below is a list of API request parameters. You need to add common request parameters to your request when calling this API. For more information, see Common Request Parameters. The Action field of this API is GetMongoDBJobInfo.

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Required</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>jobId</td>
<td>Yes</td>
<td>String</td>
<td>The task ID returned when the task is executed</td>
</tr>
</tbody>
</table>

3. Output Parameters

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>code</td>
<td>Int</td>
<td>Common error code. 0: success; other values: failure. For more information, see Common Error Codes.</td>
</tr>
<tr>
<td>message</td>
<td>String</td>
<td>Error message. A null value indicates a success</td>
</tr>
<tr>
<td>codeDesc</td>
<td>String</td>
<td>Description of the action status. When the action has succeeded, &quot;Success&quot; is returned. When the action has failed, a message describing the cause of the error is returned.</td>
</tr>
<tr>
<td>data</td>
<td>Object</td>
<td>The execution result of the task</td>
</tr>
</tbody>
</table>

data indicates the task execution result and is composed as follows:

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>data.status</td>
<td>Int</td>
<td>Task status. 0: to be executed; 1: executing, 2: succeeded; 3: failed; -1: execution error</td>
</tr>
</tbody>
</table>

4. Error Codes

The following lists the error codes related to this API.

<table>
<thead>
<tr>
<th>Error Code</th>
<th>Error Message</th>
<th>Error Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>11050</td>
<td>InvalidParameter</td>
<td>Invalid service parameter.</td>
</tr>
</tbody>
</table>
5. Samples

&<Common request parameter>
&jobId=11963

Below is a sample return:

```json
{
  "code": 0,
  "message": "",
  "codeDesc": "Success",
  "data": {
    "status": 2
  }
}
```