

# 云数据库 PostgreSQL

## API 文档

## 产品文档



腾讯云

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# API 文档

## History

最近更新时间：2023-10-13 09:42:44

### Release 26

Release time: 2023-10-13 09:40:31

Release updates:

Improvement to existing documentation.

New APIs:

- [DescribeDBInstanceHAConfig](#)
- [ModifyDBInstanceHAConfig](#)
- [SwitchDBInstancePrimary](#)

Modified APIs:

- [CloneDBInstance](#)
  - New input parameters: SyncMode
- [CreateInstances](#)
  - New input parameters: SyncMode

### Release 25

Release time: 2023-06-26 16:44:09

Release updates:

Improvement to existing documentation.

New APIs:

- [DescribeBackupDownloadRestriction](#)
- [ModifyBackupDownloadRestriction](#)
- [ModifyDBInstanceChargeType](#)

Modified APIs:

- [CreateBaseBackup](#)
  - New output parameters:BaseBackupId

## Release 24

Release time: 2023-05-04 10:04:43

Release updates:

Improvement to existing documentation.

Modified APIs:

- [DescribeBackupDownloadURL](#)
  - New input parameters:BackupDownloadRestriction

New data structures:

- [BackupDownloadRestriction](#)

## Release 23

Release time: 2023-03-31 17:18:45

Release updates:

Improvement to existing documentation.

New APIs:

- [CreateBaseBackup](#)
- [DeleteBaseBackup](#)
- [DeleteLogBackup](#)
- [DescribeBackupDownloadURL](#)
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- [DescribeBackupSummaries](#)
- [DescribeBaseBackups](#)
- [DescribeClasses](#)
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New data structures:

- [BackupSummary](#)
- [BaseBackup](#)
- [ClassInfo](#)
- [LogBackup](#)
- [Version](#)

## Release 22

Release time: 2023-01-06 11:48:30

Release updates:

Improvement to existing documentation.

New APIs:

- [CreateParameterTemplate](#)
- [DeleteParameterTemplate](#)
- [DescribeDBInstanceSecurityGroups](#)
- [DescribeDefaultParameters](#)
- [DescribeParameterTemplateAttributes](#)
- [DescribeParameterTemplates](#)
- [ModifyDBInstanceSecurityGroups](#)
- [ModifyParameterTemplate](#)

New data structures:

- [ParameterTemplate](#)
- [PolicyRule](#)
- [SecurityGroup](#)

## Release 21

Release time: 2022-12-12 15:20:52

Release updates:

Improvement to existing documentation.

New data structures:



- [ParamSpecRelation](#)
- [ParamVersionRelation](#)

Modified data structures:

- [DBInstanceNetInfo](#)
  - New members:ProtocolType
- [ParamInfo](#)
  - New members:StandbyRelated, VersionRelationSet, SpecRelationSet

## Release 20

Release time: 2022-10-21 10:39:28

Release updates:

Improvement to existing documentation.

Modified APIs:

- [CloneDBInstance](#)
  - New output parameters:DBInstanceCld
- [CreateInstances](#)
  - New input parameters:DBEngine, DBEngineConfig
- [CreateReadOnlyDBInstance](#)
  - **Modified input parameters:** DBVersion
- [DescribeProductConfig](#)
  - New input parameters:DBEngine
- [InquiryPriceCreateDBInstances](#)
  - New input parameters:InstanceType, DBEngine
  - **Modified input parameters:** Pid

Modified data structures:

- [DBInstance](#)
  - New members:DBEngine, DBEngineConfig

## Release 19

Release time: 2022-07-08 10:15:34

Release updates:

Improvement to existing documentation.

Modified APIs:

- [InquiryPriceCreateDBInstances](#)
  - New output parameters:Currency
- [InquiryPriceRenewDBInstance](#)
  - New output parameters:Currency
- [InquiryPriceUpgradeDBInstance](#)
  - New output parameters:Currency

## Release 18

Release time: 2022-05-13 10:40:43

Release updates:

Improvement to existing documentation.

New APIs:

- [DescribeEncryptionKeys](#)

New data structures:

- [EncryptionKey](#)

## Release 17

Release time: 2022-05-05 15:22:02

Release updates:

Improvement to existing documentation.

Modified APIs:

- [CreateInstances](#)
  - New input parameters:NeedSupportTDE, KMSKeyId, KMSRegion

Modified data structures:

- [DBInstance](#)
  - New members:lsSupportTDE
- [SpecInfo](#)
  - New members:SupportKMSRegions
- [SpecItemInfo](#)
  - New members:lsSupportTDE

## Release 16

Release time: 2022-03-18 10:00:12

Release updates:

Improvement to existing documentation.

New APIs:

- [CreateDBInstanceNetworkAccess](#)
- [CreateReadOnlyGroupNetworkAccess](#)
- [DeleteDBInstanceNetworkAccess](#)
- [DeleteReadOnlyGroupNetworkAccess](#)

## Release 15

Release time: 2022-01-28 15:12:20

Release updates:

Improvement to existing documentation.

New APIs:

- [CloneDBInstance](#)
- [DescribeAvailableRecoveryTime](#)
- [DescribeBackupPlans](#)
- [DescribeCloneDBInstanceSpec](#)
- [ModifyBackupPlan](#)
- [ModifyDBInstanceDeployment](#)

New data structures:

- [BackupPlan](#)

Modified data structures:

- [DBBackup](#)
  - New members:SetId
- [ZoneInfo](#)
  - New members:StandbyZoneSet

## Release 14

Release time: 2022-01-11 10:27:27

Release updates:

Improvement to existing documentation.

Modified APIs:

- [CreateDBInstances](#)
  - New input parameters:DBMajorVersion, DBKernelVersion
  - **Modified input parameters:** DBVersion
- [CreateInstances](#)
  - New input parameters:DBNodeSet

New data structures:

- [DBNode](#)

Modified data structures:

- [DBInstance](#)
  - New members:DBNodeSet
- [ServerlessDBInstance](#)
  - New members:DBMajorVersion
- [SpecItemInfo](#)
  - New members:MajorVersion, KernelVersion

## Release 13

Release time: 2021-12-27 10:21:40

Release updates:

Improvement to existing documentation.

Modified APIs:

- [CreateInstances](#)
  - New input parameters:DBMajorVersion, DBKernelVersion
  - **Modified input parameters:** DBVersion

Modified data structures:

- [DBInstance](#)
  - New members:DBMajorVersion
- [DBInstanceNetInfo](#)
  - New members:Vpclid, SubnetId

## Release 12

Release time: 2021-12-09 10:58:08

Release updates:

Improvement to existing documentation.

New data structures:

- [NetworkAccess](#)

Modified data structures:

- [DBInstance](#)
  - New members:DBKernelVersion, NetworkAccessList
- [ReadOnlyGroup](#)
  - New members:NetworkAccessList
- [ServerlessDBInstance](#)
  - New members:DBKernelVersion

## Release 11

Release time: 2021-11-19 18:12:10

Release updates:

Improvement to existing documentation.

New APIs:

- [ModifyDBInstanceSpec](#)

## Release 10

Release time: 2021-11-16 17:18:11

Release updates:

Improvement to existing documentation.

New APIs:

- [DescribeDBInstanceParameters](#)
- [DescribeParamsEvent](#)
- [ModifyDBInstanceParameters](#)

New data structures:

- [EventInfo](#)
- [EventItem](#)
- [ParamEntry](#)
- [ParamInfo](#)

## Release 9

Release time: 2021-09-09 17:55:51

Release updates:

Improvement to existing documentation.

New APIs:

- [DescribeSlowQueryAnalysis](#)
- [DescribeSlowQueryList](#)

New data structures:

- [AnalysisItems](#)
- [Detail](#)

- [DurationAnalysis](#)
- [RawSlowQuery](#)

## Release 8

Release time: 2021-08-06 15:57:30

Release updates:

Improvement to existing documentation.

New APIs:

- [ModifySwitchTimePeriod](#)

Modified APIs:

- [UpgradeDBInstance](#)
  - New input parameters:SwitchTag, SwitchStartTime, SwitchEndTime

## Release 7

Release time: 2021-06-02 17:23:48

Release updates:

Improvement to existing documentation.

New APIs:

- [CreateInstances](#)

## Release 6

Release time: 2021-04-26 17:42:28

Release updates:

Improvement to existing documentation.

New APIs:

- [DisisolateDBInstances](#)

- [IsolateDBInstances](#)

## Release 5

Release time: 2021-04-20 10:11:20

Release updates:

Improvement to existing documentation.

Modified APIs:

- [CreateDBInstances](#)
  - New input parameters:SecurityGroupIds
- [CreateReadOnlyDBInstance](#)
  - New input parameters:SecurityGroupIds
- [CreateReadOnlyGroup](#)
  - New input parameters:SecurityGroupIds

Modified data structures:

- [DBInstance](#)
  - New members:OfflineTime

## Release 4

Release time: 2021-03-01 16:57:48

Release updates:

Improvement to existing documentation.

New APIs:

- [AddDBInstanceToReadOnlyGroup](#)
- [CreateReadOnlyDBInstance](#)
- [CreateReadOnlyGroup](#)
- [DeleteReadOnlyGroup](#)
- [DescribeReadOnlyGroups](#)
- [ModifyDBInstanceReadOnlyGroup](#)
- [ModifyReadOnlyGroupConfig](#)
- [RebalanceReadOnlyGroup](#)



- [RemoveDBInstanceFromReadOnlyGroup](#)

New data structures:

- [ReadOnlyGroup](#)

Modified data structures:

- [RegionInfo](#)
  - New members:SupportInternational

## Release 3

Release time: 2021-02-26 16:43:58

Release updates:

Improvement to existing documentation.

New APIs:

- [CloseServerlessDBExtranetAccess](#)
- [OpenServerlessDBExtranetAccess](#)

## Release 2

Release time: 2020-12-01 20:28:46

Release updates:

Improvement to existing documentation.

New APIs:

- [CreateServerlessDBInstance](#)
- [DeleteServerlessDBInstance](#)
- [DescribeServerlessDBInstances](#)

New data structures:

- [ServerlessDBAccount](#)
- [ServerlessDBInstance](#)
- [ServerlessDBInstanceNetInfo](#)

Modified data structures:

- [DBInstance](#)
  - New members: MasterDBInstanceId, ReadOnlyInstanceNum, StatusInReadOnlyGroup

## Existing Release

Release time: 2020-07-24 14:20:11

Existing APIs/data structures are as follows:

Improvement to existing documentation.

Existing APIs:

- [CloseDBExtranetAccess](#)
- [CreateDBInstances](#)
- [DescribeAccounts](#)
- [DescribeDBBackups](#)
- [DescribeDBErrlogs](#)
- [DescribeDBInstanceAttribute](#)
- [DescribeDBInstances](#)
- [DescribeDBSlowlogs](#)
- [DescribeDBXlogs](#)
- [DescribeDatabases](#)
- [DescribeOrders](#)
- [DescribeProductConfig](#)
- [DescribeRegions](#)
- [DescribeZones](#)
- [DestroyDBInstance](#)
- [InitDBInstances](#)
- [InquiryPriceCreateDBInstances](#)
- [InquiryPriceRenewDBInstance](#)
- [InquiryPriceUpgradeDBInstance](#)
- [ModifyAccountRemark](#)
- [ModifyDBInstanceName](#)
- [ModifyDBInstancesProject](#)
- [OpenDBExtranetAccess](#)
- [RenewInstance](#)
- [ResetAccountPassword](#)

- 
- [RestartDBInstance](#)
  - [SetAutoRenewFlag](#)
  - [UpgradeDBInstance](#)

Existing data structures:

- [AccountInfo](#)
- [DBBackup](#)
- [DBInstance](#)
- [DBInstanceNetInfo](#)
- [ErrLogDetail](#)
- [Filter](#)
- [NormalQueryItem](#)
- [PgDeal](#)
- [RegionInfo](#)
- [SlowlogDetail](#)
- [SpecInfo](#)
- [SpecItemInfo](#)
- [Xlog](#)
- [ZoneInfo](#)

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# Introduction

最近更新时间：2023-06-26 17:24:00

TencentDB for PostgreSQL enables you to easily configure, use and scale PostgreSQL, one of the most powerful open-source databases, on the cloud. Tencent Cloud takes care of the complicated and time-consuming tasks, such as software installation, storage management, high-availability replication, and data backup for disaster recovery. You can then focus your energies on developing your applications and business growth.

# API Category

最近更新时间：2023-10-13 09:42:44

## Instance APIs

API Name	Feature	Frequency Limit (maximum requests per second)
<a href="#">CreateInstances</a>	Creates an instance	100
<a href="#">DescribeDBInstances</a>	Queries instance list	1000
<a href="#">DescribeDBInstanceAttribute</a>	Queries instance details	1000
<a href="#">DescribeEncryptionKeys</a>	Queries the instance key list	1000
<a href="#">DescribeDBInstanceHAConfig</a>	Queries the HA configuration of an instance	20
<a href="#">SwitchDBInstancePrimary</a>	Enables the primary-standby switch of an instance	20
<a href="#">ModifyDBInstanceName</a>	Renames instance	100
<a href="#">ModifyDBInstanceSpec</a>	Modifies instance specifications	100
<a href="#">ModifyDBInstanceDeployment</a>	Modifies the instance deployment mode	100
<a href="#">UpgradeDBInstanceKernelVersion</a>	Upgrades the kernel version of an instance	100
<a href="#">ModifyDBInstanceHAConfig</a>	Modifies the HA configuration of an instance	20
<a href="#">ModifyDBInstanceChargeType</a>	Modifies the instance billing mode	20
<a href="#">ModifyDBInstancesProject</a>	Modifies the project of an instance	100
<a href="#">ModifySwitchTimePeriod</a>	Modifies the switch time after configuration upgrade	100
<a href="#">RenewInstance</a>	Renews instance	100
<a href="#">SetAutoRenewFlag</a>	Sets auto-renewal	100

<a href="#">RestartDBInstance</a>	Restarts instance	50
<a href="#">IsolateDBInstances</a>	Isolates instances	100
<a href="#">DisIsolateDBInstances</a>	Removes instances from isolation	100
<a href="#">DestroyDBInstance</a>	Terminates an instance	50
<a href="#">CreateDBInstances</a>	(Disused) Creates an instance	100
<a href="#">InitDBInstances</a>	(Disused) Initializes an instance	100
<a href="#">UpgradeDBInstance</a>	Upgrades instance configuration (deprecated)	100

## Read-only Replica APIs

API Name	Feature	Frequency Limit (maximum requests per second)
<a href="#">CreateReadOnlyGroup</a>	Creates an RO group	100
<a href="#">DescribeReadOnlyGroups</a>	Queries the list of RO groups	1000
<a href="#">ModifyReadOnlyGroupConfig</a>	Modifies RO group configuration	100
<a href="#">DeleteReadOnlyGroup</a>	Deletes an RO group	100
<a href="#">CreateReadOnlyDBInstance</a>	Creates read-only replicas	100
<a href="#">AddDBInstanceToReadOnlyGroup</a>	Adds a read-only replica to an RO group	100
<a href="#">RemoveDBInstanceFromReadOnlyGroup</a>	Removes a read-only replica from an RO group	100
<a href="#">ModifyDBInstanceReadOnlyGroup</a>	Modifies the RO group of an instance	100
<a href="#">RebalanceReadOnlyGroup</a>	Rebalances the loads of read-only replicas in an RO group	100

## Backup and Restoration APIs

API Name	Feature	Frequency Limit (maximum requests per second)
<a href="#">DescribeAvailableRecoveryTime</a>	Queries the available restoration time of an instance	1000
<a href="#">DescribeCloneDBInstanceSpec</a>	Queries the purchasable specification of a clone instance	1000
<a href="#">CloneDBInstance</a>	Clones an instance	100
<a href="#">DescribeBackupOverview</a>	Queries the backup overview	1000
<a href="#">DescribeBackupSummaries</a>	Queries the backup statistics	1000
<a href="#">DescribeBackupPlans</a>	Queries backup plans	1000
<a href="#">ModifyBackupPlan</a>	Modifies a backup plan	100
<a href="#">CreateBaseBackup</a>	Creates a full backup of an instance	100
<a href="#">DescribeBaseBackups</a>	Queries the list of full backups	1000
<a href="#">ModifyBaseBackupExpireTime</a>	Modifies the expiration time of a full backup	100
<a href="#">DeleteBaseBackup</a>	Deletes a full backup of an instance	100
<a href="#">DescribeLogBackups</a>	Queries the list of log backups	1000
<a href="#">DeleteLogBackup</a>	Deletes a log backup of an instance	100
<a href="#">DescribeBackupDownloadURL</a>	Queries the download address of a backup set	1000
<a href="#">DescribeBackupDownloadRestriction</a>	Queries the backup download restrictions	20
<a href="#">ModifyBackupDownloadRestriction</a>	Modifies the backup download restrictions	20
<a href="#">DescribeDBXlogs</a>	(Disused) Gets the instance Xlog list	1000
<a href="#">DescribeDBBackups</a>	(Disused) Queries the backup list of an instance	1000

## Parameter Management APIs

API Name	Feature	Frequency Limit (maximum requests per second)
<a href="#">CreateParameterTemplate</a>	Creates a parameter template	100
<a href="#">DescribeParameterTemplates</a>	Queries the list of parameter templates	1000
<a href="#">DescribeParameterTemplateAttributes</a>	Queries the details of a parameter template	1000
<a href="#">ModifyParameterTemplate</a>	Modifies a parameter template	100
<a href="#">DeleteParameterTemplate</a>	Deletes a parameter template	100
<a href="#">DescribeDefaultParameters</a>	Queries the list of default parameters	1000
<a href="#">DescribeDBInstanceParameters</a>	Queries the parameters of an instance	1000
<a href="#">DescribeParamsEvent</a>	Queries the parameter modification event	1000
<a href="#">ModifyDBInstanceParameters</a>	Modifies instance parameters	100

## Network APIs

API Name	Feature	Frequency Limit (maximum requests per second)
<a href="#">CreateDBInstanceNetworkAccess</a>	Creates a network for an instance	100
<a href="#">DeleteDBInstanceNetworkAccess</a>	Deletes a network of an instance	100
<a href="#">OpenDBExtranetAccess</a>	Enables the public network access of an instance	100
<a href="#">CloseDBExtranetAccess</a>	Disables the public network address of an instance	100
<a href="#">CreateReadOnlyGroupNetworkAccess</a>	Creates a network for an RO	100



	group	
<a href="#">DeleteReadOnlyGroupNetworkAccess</a>	Deletes a network of an RO group	100

## Security Group APIs

API Name	Feature	Frequency Limit (maximum requests per second)
<a href="#">DescribeDBInstanceSecurityGroups</a>	Queries the security group of an instance	1000
<a href="#">ModifyDBInstanceSecurityGroups</a>	Modifies the security group of an instance	100

## Performance Optimization APIs

API Name	Feature	Frequency Limit (maximum requests per second)
<a href="#">DescribeDBErrlogs</a>	Queries an error log	100
<a href="#">DescribeSlowQueryAnalysis</a>	Gets the statistical analysis list of slow queries	100
<a href="#">DescribeSlowQueryList</a>	Gets the slow query list	100
<a href="#">DescribeDBSlowlogs</a>	Gets slow query logs (deprecated)	100

## Account APIs

API Name	Feature	Frequency Limit (maximum requests per second)
<a href="#">DescribeDatabases</a>	Queries the database list of an instance	1000
<a href="#">DescribeAccounts</a>	Queries the list of the database accounts for an instance	1000

<a href="#">ModifyAccountRemark</a>	Modifies account remarks	100
<a href="#">ResetAccountPassword</a>	Resets account password	100

## Specification APIs

API Name	Feature	Frequency Limit (maximum requests per second)
<a href="#">DescribeRegions</a>	Queries purchasable regions	1000
<a href="#">DescribeZones</a>	Queries purchasable AZs	1000
<a href="#">DescribeClasses</a>	Queries purchasable specifications	1000
<a href="#">DescribeDBVersions</a>	Queries the list of supported database versions	1000
<a href="#">InquiryPriceCreateDBInstances</a>	Queries the purchase price of an instance	20
<a href="#">InquiryPriceRenewDBInstance</a>	Queries the renewal price of instance	20
<a href="#">InquiryPriceUpgradeDBInstance</a>	Queries the upgrade price of instance	20
<a href="#">DescribeOrders</a>	Queries the order information	1000
<a href="#">DescribeProductConfig</a>	(Disused) Queries purchasable specification configuration	1000

## PostgreSQL for Serverless APIs

API Name	Feature	Frequency Limit (maximum requests per second)
<a href="#">CreateServerlessDBInstance</a>	Creates a PostgreSQL for Serverless instance	100
<a href="#">DescribeServerlessDBInstances</a>	Queries the list of PostgreSQL for Serverless instances	1000
<a href="#">DeleteServerlessDBInstance</a>	Deletes a PostgreSQL for Serverless	100

	instance	
<a href="#">OpenServerlessDBExtranetAccess</a>	Enables the public network address of a PostgreSQL for Serverless instance	100
<a href="#">CloseServerlessDBExtranetAccess</a>	Disables the public network address of a PostgreSQL for Serverless instance	100

# Making API Requests

## Request Structure

最近更新时间：2023-06-26 17:24:00

### 1. Service Address

The API supports access from either a nearby region (at `postgres.tencentcloudapi.com`) or a specified region (at `postgres.ap-guangzhou.tencentcloudapi.com` for Guangzhou, for example).

We recommend using the domain name to access the nearest server. When you call an API, the request is automatically resolved to a server in the region **nearest** to the location 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, the result is the same as that of specifying the region in the domain like "`postgres.ap-guangzhou.tencentcloudapi.com`".

**Note: For latency-sensitive businesses, we recommend that you specify the region in the domain name.**

Tencent Cloud currently supports the following regions:

Hosted region	Domain name
Local access region (recommended, only for non-financial availability zones)	<code>postgres.tencentcloudapi.com</code>
South China (Guangzhou)	<code>postgres.ap-guangzhou.tencentcloudapi.com</code>
East China (Shanghai)	<code>postgres.ap-shanghai.tencentcloudapi.com</code>
North China (Beijing)	<code>postgres.ap-beijing.tencentcloudapi.com</code>
Southwest China (Chengdu)	<code>postgres.ap-chengdu.tencentcloudapi.com</code>
Southwest China (Chongqing)	<code>postgres.ap-chongqing.tencentcloudapi.com</code>
Hong Kong, Macao, Taiwan (Hong Kong, China)	<code>postgres.ap-hongkong.tencentcloudapi.com</code>
Southeast Asia (Singapore)	<code>postgres.ap-singapore.tencentcloudapi.com</code>

Southeast Asia (Bangkok)	postgres.ap-bangkok.tencentcloudapi.com
South Asia (Mumbai)	postgres.ap-mumbai.tencentcloudapi.com
Northeast Asia (Seoul)	postgres.ap-seoul.tencentcloudapi.com
Northeast Asia (Tokyo)	postgres.ap-tokyo.tencentcloudapi.com
U.S. East Coast (Virginia)	postgres.na-ashburn.tencentcloudapi.com
U.S. West Coast (Silicon Valley)	postgres.na-siliconvalley.tencentcloudapi.com
North America (Toronto)	postgres.na-toronto.tencentcloudapi.com
Europe (Frankfurt)	postgres.eu-frankfurt.tencentcloudapi.com

## 2. Communications Protocol

All the Tencent Cloud APIs communicate via HTTPS, providing highly secure communication tunnels.

## 3. Request Methods

Supported HTTP request methods:

- POST (recommended)
- GET

The Content-Type types supported by POST requests:

- application/json (recommended). The TC3-HMAC-SHA256 signature algorithm must be used.
- application/x-www-form-urlencoded. The HmacSHA1 or HmacSHA256 signature algorithm must be used.
- multipart/form-data (only supported by certain APIs). You must use TC3-HMAC-SHA256 to calculate the signature.

The size of a GET request packet is up to 32 KB. The size of a POST request is up to 1 MB when the HmacSHA1 or HmacSHA256 signature algorithm is used, and up to 10 MB when TC3-HMAC-SHA256 is used.

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## 4. Character Encoding

Only UTF-8 encoding is used.

# Common Params

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Common parameters are used for all APIs authenticating requestors. Common parameters must be included in all API requests, and they will not be described in individual API documents.

The exact contents of the common parameters will vary depending on the version of the signature method you use.

## Common parameters for Signature Algorithm v3

When the TC3-HMAC-SHA256 algorithm is used, the common parameters should be uniformly placed in the HTTP request header, as shown below:

Parameter Name	Type	Required	Description
X-TC-Action	String	Yes	The name of the API for the desired operation. For the specific value, see description of common parameter <code>Action</code> in the input parameters in related API documentation. For example, the API for querying the CVM instance list is <code>DescribeInstances</code> .
X-TC-Region	String	Yes	Region parameter, which is used to identify the region to which the data you work with belongs. For values supported for an API, see the description of common parameter <code>Region</code> in the input parameters in related API documentation. This parameter is not required for some APIs (which will be indicated in related API documentation), and will not take effect even it is passed.
X-TC-Timestamp	Integer	Yes	The current UNIX timestamp that records the time when the API request is sent. For example, 1529223702. Note: If the difference between the UNIX timestamp and server time is greater than 5 minutes, a signature expiration error may occur.
X-TC-Version	String	Yes	API version of the action. For the valid values, see the description of the common parameter <code>Version</code> in the API documentation. For example, the version is 2017-03-12.
Authorization	String	Yes	The HTTP authentication request header, for example: TC3-HMAC-SHA256 Credential=AKIDEXAMPLE/Date/service/tc3_request;SignedHeaders=content-type;host, Signature=fe5f80f77d5fa3beca038a248ff027d0445342fe2855ddc96317 Here: - TC3-HMAC-SHA256: Signature method, currently fixed as this value; - Credential: Signature credential; AKIDEXAMPLE is the SecretId; Date is UNIX time, and this value must match the value of X-TC-Timestamp (a co

			parameter) in UTC time format; service is the name of the product/service generally a domain name prefix. For example, a domain name cvm.tencent refers to the CVM product and the value would be cvm; - SignedHeaders: The headers that contains the authentication information type and host are the required headers; - Signature: Signature digest.
X-TC-Token	String	No	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.

Assuming you want to query the list of Cloud Virtual Machine instances in the Guangzhou region, the request structure in the form of request URL, request header and request body may be as follows:

Example of an HTTP GET request structure:

```

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
    
```

The following example shows you how to structure 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=582c400e06b5924a6f2b5d7d672d79c15b13162d9279b0855cfba6789a8edb4c
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 structure (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=582c400e06b5924a6f2b5d7d672d79c15b1316
2d9279b0855cfba6789a8edb4c
```

```
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--
```

## Common parameters for Signature Algorithm v1

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

Parameter Name	Type	Required	Description
Action	String	Yes	The name of the API for the desired operation. For the specific value, see the description of common parameter <code>Action</code> in the input parameters in related API documentation. For example, the API for querying the CVM instance list is <code>DescribeInstances</code> .
Region	String	Yes	Region parameter, which is used to identify the region to which the data you want to work with belongs. For values supported for an API, see the description of common parameter <code>Region</code> in the input parameters in related API documentation. Note: This parameter is not required for some APIs (which will be indicated in related API documentation), and will not take effect even if it is passed.

Timestamp	Integer	Yes	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.
Nonce	Integer	Yes	A random positive integer used along with <code>Timestamp</code> to prevent replay attacks.
SecretId	String	Yes	The identifying SecretId obtained on the <a href="#">Cloud API Key</a> page. A SecretId corresponds to a unique SecretKey which is used to generate the request signature (Signature).
Signature	String	Yes	Request signature used to verify the validity of this request. This is calculated based on the actual input parameters. For more information about how this is calculated, see the API authentication documentation.
Version	String	Yes	API version of the action. For the valid values, see the description of the common input parameter <code>Version</code> in the API documentation. For example, the version of CVM is 2017-03-12.
SignatureMethod	String	No	Signature method. Currently, only HmacSHA256 and HmacSHA1 are supported. The HmacSHA256 algorithm is used to verify the signature only when this parameter is specified as HmacSHA256. In other cases, the signature is verified with HmacSHA1.
Token	String	No	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.

Assuming you want to query the list of Cloud Virtual Machine instances in the Guangzhou region, the request structure in the form of request URL, request header and request body may be as follows:

Example of an HTTP GET request structure:

```
https://cvm.tencentcloudapi.com/?Action=DescribeInstances&Version=2017-03-12&SignatureMethod=HmacSHA256&Timestamp=1527672334&Signature=37ac2f4fde00b0ac9bd9eadeb459b1bbec224158d66e7ae5fcadb70b2d181d02&Region=ap-guangzhou&Nonce=23823223&SecretId=AKIDEXAMPLE
```

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

Example of an HTTP POST request structure:

```
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=37ac2f4fde00b0ac9bd9eadeb459b1bbee224158d66e7ae5fcadb70b2d181d02&Region=ap-guangzhou&Nonce=23823223&SecretId=AKIDEXAMPLE
```

# Signature v3

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TencentCloud API authenticates every single request, i.e., the request must be signed using the security credentials in the designated steps. Each request has to contain the signature information (Signature) in the common request parameters and be sent in the specified way and format.

## Applying for Security Credentials

The security credential used in this document is a key, which includes a SecretId and a SecretKey. Each user can have up to two pairs of keys.

- SecretId: Used to identify the API caller, which is just like a username.
- SecretKey: Used to authenticate the API caller, which is just like a password.
- **You must keep your security credentials private and avoid disclosure; otherwise, your assets may be compromised. If they are disclosed, please disable them as soon as possible.**

You can apply for the security credentials through the following steps:

1. Log in to the [Tencent Cloud Console](#).
2. Go to the [TencentCloud API Key](#) console page.
3. On the [TencentCloud API Key](#) page, click **Create** to create a SecretId/SecretKey pair.

## Using the Resources for Developers

TencentCloud API comes with SDKs for seven commonly used programming languages, including [Python](#), [Java](#), [PHP](#), [Go](#), [NodeJS](#) and [.NET](#). In addition, it provides [API Explorer](#) which enables online call, signature verification, and SDK code generation. If you have any troubles calculating a signature, consult these resources.

## TC3-HMAC-SHA256 Signature Algorithm

Compatible with the previous HmacSHA1 and HmacSHA256 signature algorithms, the TC3-HMAC-SHA256 signature algorithm is more secure and supports larger requests and JSON format with better performance. We recommend using TC3-HMAC-SHA256 to calculate the signature.

TencentCloud API supports both GET and POST requests. 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 POST method is recommended, as there is no difference in the results of both the methods, but the GET method only supports request packets up to 32 KB.

The following uses querying the list of CVM instances in the Guangzhou region as an example to describe the steps of signature splicing. We chose this API because:

1. CVM is activated by default, and this API is often used;
2. It is read-only and does not change the status of existing resources;
3. It covers many types of parameters, which allows it to be used to demonstrate how to use arrays containing data structures.

In the example, we try to choose common parameters and API parameters that are prone to mistakes. When you actually call an API, please use parameters based on the actual conditions. The parameters vary by API. Do not copy the parameters and values in this example.

Assuming that your SecretId and SecretKey are `AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****` and `Gu5t9xGARNpq86cd98joQYCN3*****`, respectively, if you want to view the status of the instance in the Guangzhou region whose CVM instance name is "unnamed" and have only one data entry returned, then the request may be:

```
curl -X POST https://cvm.tencentcloudapi.com \
-H "Authorization: TC3-HMAC-SHA256 Credential=AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****
*/2019-02-25/cvm/tc3_request, SignedHeaders=content-type;host, Signature=c492e8e4
1437e97a620b728c301bb8d17e7dc0c17eeabce80c20cd70fc3a78ff" \
-H "Content-Type: application/json; charset=utf-8" \
-H "Host: cvm.tencentcloudapi.com" \
-H "X-TC-Action: DescribeInstances" \
-H "X-TC-Timestamp: 1551113065" \
-H "X-TC-Version: 2017-03-12" \
-H "X-TC-Region: ap-guangzhou" \
-d '{"Limit": 1, "Filters": [{"Values": ["unnamed"], "Name": "instance-name"}]}'
```

The signature calculation process is explained in detail below.

## 1. Concatenating the CanonicalRequest String

Concatenate the canonical request string (CanonicalRequest) in the following pseudocode format:

```
CanonicalRequest =
HTTPRequestMethod + '\n' +
CanonicalURI + '\n' +
```

```
CanonicalQueryString + '\n' +
CanonicalHeaders + '\n' +
SignedHeaders + '\n' +
HashedRequestPayload
```

Field Name	Explanation
HTTPRequestMethod	HTTP request method (GET or POST). This example uses <code>POST</code> .
CanonicalURI	URI parameter. Slash ("/") is used for API 3.0.
CanonicalQueryString	<p>The query string in the URL of the originating HTTP request. This is always an empty string for POST requests, and is the string after the question mark (?) for GET requests. For example: <code>Limit=10&amp;Offset=0</code>.</p> <p>Note: <code>CanonicalQueryString</code> must be URL-encoded, referencing <a href="#">RFC3986</a>, the UTF8 character set. We recommend using the programming language library. All special characters must be encoded and capitalized.</p>
CanonicalHeaders	<p>Header information for signature calculation, including at least two headers of <code>host</code> and <code>content-type</code>. Custom headers can be added to participate in the signature process to improve the uniqueness and security of the request.</p> <p>Concatenation rules:</p> <ol style="list-style-type: none"> <li>Both the key and value of the header should be converted to lowercase with the leading and trailing spaces removed, so they are concatenated in the format of <code>key:value\n</code> format;</li> <li>If there are multiple headers, they should be sorted in ASCII ascending order by the header keys (lowercase).</li> </ol> <p>The calculation result in this example is <code>content-type:application/json; charset=utf-8\nhost:cvm.tencentcloudapi.com\n</code>.</p> <p>Note: <code>content-type</code> must match the actually sent content. In some programming languages, a charset value would be added even if it is not specified. In this case, the request sent is different from the one signed, and the server will return an error indicating signature verification failed.</p>
SignedHeaders	<p>Header information for signature calculation, indicating which headers of the request participate in the signature process (they must each individually correspond to the headers in CanonicalHeaders). <code>Content-type</code> and <code>host</code> are required headers.</p> <p>Concatenation rules:</p> <ol style="list-style-type: none"> <li>Both the key and value of the header should be converted to lowercase;</li> <li>If there are multiple headers, they should be sorted in ASCII ascending order by the header keys (lowercase) and separated by semicolons (;).</li> </ol> <p>The value in this example is <code>content-type;host</code></p>
HashedRequestPayload	Hash value of the request payload (i.e., the body, such as <code>{"Limit": 1, "Filter</code>

```
[{"Values": ["unnamed"], "Name": "instance-name"}]} in this example
```

The pseudocode for calculation is  
 Lowercase(HexEncode(Hash.SHA256(RequestPayload))) by SHA256 hashing the pay  
 of the HTTP request, performing hexadecimal encoding, and finally converting the encc  
 string to lowercase letters. For GET requests, `RequestPayload` is always an empt  
 string. The calculation result in this example is  
`99d58dfbc6745f6747f36bfca17dee5e6881dc0428a0a36f96199342bc5b4907`

According to the rules above, the `CanonicalRequest` string obtained in the example is as follows:

```
POST
/

content-type:application/json; charset=utf-8
host:cvm.tencentcloudapi.com

content-type;host
99d58dfbc6745f6747f36bfca17dee5e6881dc0428a0a36f96199342bc5b4907
```

## 2. Concatenating the String to Be Signed

The string to sign is concatenated as follows:

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

Field Name	Explanation
Algorithm	Signature algorithm, which is currently always <code>TC3-HMAC-SHA256</code> .
RequestTimestamp	Request timestamp, i.e., the value of the common parameter <code>X-TC-Timestamp</code> in request header, which is the UNIX timestamp of the current time in seconds, such as <code>1551113065</code> in this example.
CredentialScope	Scope of the credential in the format of <code>Date/service/tc3_request</code> , including date, requested service and termination string (tc3_request). <b>Date is a date in UTC time, whose value should match the UTC date converted by the common parameter X-TC-Timestamp</b> ; <code>service</code> is the product name, which should match the domain name of the product called. The calculation result in this example is <code>20180525/cvm/tc3_request</code> .

HashedCanonicalRequest	Hash value of the CanonicalRequest string concatenated in the steps above. The pseudocode for calculation is Lowercase(HexEncode(Hash.SHA256(CanonicalRequest))) The calculation result in this example is 2815843035062ffffda5fd6f2a44ea8a34818b0dc46f024b8b3786976a3ad
------------------------	--

Note:

1. Date has to be calculated from the timestamp "X-TC-Timestamp" and the time zone is UTC+0. If you add the system's local time zone information (such as UTC+8), calls can succeed both day and night but will definitely fail at 00:00. For example, if the timestamp is 1551113065 and the time in UTC+8 is 2019-02-26 00:44:25, the UTC+0 date in the calculated Date value should be 2019-02-25 instead of 2019-02-26.
2. Timestamp must be the same as your current system time, and your system time and standard time must be synced; if the difference between Timestamp and your current system time is larger than five minutes, the request will fail. If your system time is out of sync with the standard time for a while, the request will fail and return a signature expiration error.

According to the preceding rules, the string to be signed obtained in the example is as follows:

```
TC3-HMAC-SHA256
1551113065
2019-02-25/cvm/tc3_request
2815843035062ffffda5fd6f2a44ea8a34818b0dc46f024b8b3786976a3adda7a
```

### 3. Calculating the Signature

1. Calculate the derived signature key with the following pseudocode:

```
SecretKey = "Gu5t9xGARNpq86cd98joQYCN3*****"
SecretDate = HMAC_SHA256("TC3" + SecretKey, Date)
SecretService = HMAC_SHA256(SecretDate, Service)
SecretSigning = HMAC_SHA256(SecretService, "tc3_request")
```

Field Name	Explanation
SecretKey	The original SecretKey, i.e., Gu5t9xGARNpq86cd98joQYCN3***** .
Date	The Date field information in Credential , such as 2019-02-25 in this example.



Service	Value in the Service field in <code>Credential</code> , such as <code>cvm</code> in this example.
---------	---

2. Calculate the signature with the following pseudocode:

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

#### 4. Concatenating the Authorization

The Authorization is concatenated as follows:

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

Field Name	Explanation
Algorithm	Signature algorithm, which is always <code>TC3-HMAC-SHA256</code> .
SecretId	The SecretId in the key pair, i.e., <code>AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****</code> .
CredentialScope	Credential scope (see above). The calculation result in this example is <code>2019-02-25/cvm/tc3_request</code> .
SignedHeaders	Header information for signature calculation (see above), such as <code>content-type;host</code> in this example.
Signature	Signature value. The calculation result in this example is <code>c492e8e41437e97a620b728c301bb8d17e7dc0c17eeabce80c20cd70fc3a78ff</code> .

According to the rules above, the value obtained in the example is:

```
TC3-HMAC-SHA256 Credential=AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****/2019-02-25/cvm/tc3_request, SignedHeaders=content-type;host, Signature=c492e8e41437e97a620b728c301bb8d17e7dc0c17eeabce80c20cd70fc3a78ff
```

The following example shows a finished authorization header:

```
POST https://cvm.tencentcloudapi.com/
Authorization: TC3-HMAC-SHA256 Credential=AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****/2019-02-25/cvm/tc3_request, SignedHeaders=content-type;host, Signature=c492e8e41437e97a620b728c301bb8d17e7dc0c17eeabce80c20cd70fc3a78ff
```

```
Content-Type: application/json; charset=utf-8
Host: cvm.tencentcloudapi.com
X-TC-Action: DescribeInstances
X-TC-Version: 2017-03-12
X-TC-Timestamp: 1551113065
X-TC-Region: ap-guangzhou

{"Limit": 1, "Filters": [{"Values": ["unnamed"], "Name": "instance-name"}]}
```

## 5. Signature Demo

When calling API 3.0, you are recommended to use the corresponding Tencent Cloud SDK 3.0 which encapsulates the signature process, enabling you to focus on only the specific APIs provided by the product when developing. See [SDK Center](#) for more information. Currently, the following programming languages are supported:

- [Python](#)
- [Java](#)
- [PHP](#)
- [Go](#)
- [NodeJS](#)
- [.NET](#)

To further explain the signing process, we will use a programming language to implement the process described above. The request domain name, API and parameter values in the sample are used here. This goal of this example is only to provide additional clarification for the signature process, please see the SDK for actual usage.

The final output URL might be: `https://cvm.tencentcloudapi.com/?Action=DescribeInstances&InstanceIds.0=ins-09dx96dg&Limit=20&Nonce=11886&Offset=0&Region=ap-guangzhou&SecretId=AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****&Signature=EliP9YW3pW28FpsEdkXt%2F%2BWcGel%3D&Timestamp=1465185768&Version=2017-03-12.`

Note: The key in the example is fictitious, and the timestamp is not the current time of the system, so if this URL is opened in the browser or called using commands such as curl, an authentication error will be returned: Signature expired. In order to get a URL that can work properly, you need to replace the SecretId and SecretKey in the example with your real credentials and use the current time of the system as the Timestamp.

Note: In the example below, even if you use the same programming language, the order of the parameters in the URL may be different for each execution. However, the order does not matter, as long as all the parameters are included in the URL and the signature is calculated correctly.

Note: The following code is only applicable to API 3.0. It cannot be directly used in other signature processes. Even with an older API, signature calculation errors may occur due to the differences in details. Please refer to the corresponding documentation.

## Java

```

import java.nio.charset.Charset;
import java.nio.charset.StandardCharsets;
import java.security.MessageDigest;
import java.text.SimpleDateFormat;
import java.util.Date;
import java.util.TimeZone;
import java.util.TreeMap;
import javax.crypto.Mac;
import javax.crypto.spec.SecretKeySpec;
import javax.xml.bind.DatatypeConverter;

public class TencentCloudAPITC3Demo {
    private final static Charset UTF8 = StandardCharsets.UTF_8;
    private final static String SECRET_ID = "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****";
    private final static String SECRET_KEY = "Gu5t9xGARNpq86cd98joQYCN3*****";
    private final static String CT_JSON = "application/json; charset=utf-8";

    public static byte[] hmac256(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(UTF8));
    }

    public static String sha256Hex(String s) throws Exception {
        MessageDigest md = MessageDigest.getInstance("SHA-256");
        byte[] d = md.digest(s.getBytes(UTF8));
        return DatatypeConverter.printHexBinary(d).toLowerCase();
    }

    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 = "1551113065";
        //String timestamp = String.valueOf(System.currentTimeMillis() / 1000);
        SimpleDateFormat sdf = new SimpleDateFormat("yyyy-MM-dd");
        // Pay attention to the time zone; otherwise, errors may occur
        sdf.setTimeZone(TimeZone.getTimeZone("UTC"));
        String date = sdf.format(new Date(Long.valueOf(timestamp + "000")));

        // ***** Step 1: Concatenate the CanonicalRequest string *****
    }
}

```

```

String httpRequestMethod = "POST";
String canonicalUri = "/";
String canonicalQueryString = "";
String canonicalHeaders = "content-type:application/json; charset=utf-8\n" + "host:" + host + "\n";
String signedHeaders = "content-type;host";

String payload = "{\"Limit\": 1, \"Filters\": [{\"Values\": [\"unnamed\"], \"Name\": \"instance-name\"}]}";
String hashedRequestPayload = sha256Hex(payload);
String canonicalRequest = httpRequestMethod + "\n" + canonicalUri + "\n" + canonicalQueryString + "\n"
+ canonicalHeaders + "\n" + signedHeaders + "\n" + hashedRequestPayload;
System.out.println(canonicalRequest);

// ***** Step 2: Concatenate the string to sign *****
String credentialScope = date + "/" + service + "/" + "tc3_request";
String hashedCanonicalRequest = sha256Hex(canonicalRequest);
String stringToSign = algorithm + "\n" + timestamp + "\n" + credentialScope +
"\n" + hashedCanonicalRequest;
System.out.println(stringToSign);

// ***** Step 3: Calculate the signature *****
byte[] secretDate = hmac256(("TC3" + SECRET_KEY).getBytes(UTF8), date);
byte[] secretService = hmac256(secretDate, service);
byte[] secretSigning = hmac256(secretService, "tc3_request");
String signature = DatatypeConverter.printHexBinary(hmac256(secretSigning, stringToSign)).toLowerCase();
System.out.println(signature);

// ***** Step 4: Concatenate the Authorization *****
String authorization = algorithm + " " + "Credential=" + SECRET_ID + "/" + credentialScope + ", "
+ "SignedHeaders=" + signedHeaders + ", " + "Signature=" + signature;
System.out.println(authorization);

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

StringBuilder sb = new StringBuilder();
sb.append("curl -X POST https://").append(host)

```

```

.append(" -H \"Authorization: ").append(authorization).append("\")
.append(" -H \"Content-Type: application/json; charset=utf-8\"")
.append(" -H \"Host: ").append(host).append("\")
.append(" -H \"X-TC-Action: ").append(action).append("\")
.append(" -H \"X-TC-Timestamp: ").append(timestamp).append("\")
.append(" -H \"X-TC-Version: ").append(version).append("\")
.append(" -H \"X-TC-Region: ").append(region).append("\")
.append(" -d ").append(payload).append(" ");
System.out.println(sb.toString());
}
}

```

## Python

```

# -*- coding: utf-8 -*-
import hashlib, hmac, json, os, sys, time
from datetime import datetime

# Key Parameters
secret_id = "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****"
secret_key = "Gu5t9xGARNpq86cd98joQYCN3*****"

service = "cvm"
host = "cvm.tencentcloudapi.com"
endpoint = "https://" + host
region = "ap-guangzhou"
action = "DescribeInstances"
version = "2017-03-12"
algorithm = "TC3-HMAC-SHA256"
#timestamp = int(time.time())
timestamp = 1551113065
date = datetime.utcnow().fromtimestamp(timestamp).strftime("%Y-%m-%d")
params = {"Limit": 1, "Filters": [{"Name": "instance-name", "Values": ["unnamed"]}]}

# ***** Step 1: Concatenate the CanonicalRequest string *****
http_request_method = "POST"
canonical_uri = "/"
canonical_querystring = ""
ct = "application/json; charset=utf-8"
payload = json.dumps(params)
canonical_headers = "content-type:%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: Concatenate the string to sign *****
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: Calculate the 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: Concatenate the Authorization *****
authorization = (algorithm + " " +
"Credential=" + secret_id + "/" + credential_scope + ", " +
"SignedHeaders=" + signed_headers + ", " +
"Signature=" + signature)
print(authorization)

print('curl -X POST ' + endpoint
+ ' -H "Authorization: ' + authorization + '" '
+ ' -H "Content-Type: application/json; charset=utf-8" '
+ ' -H "Host: ' + host + '" '
+ ' -H "X-TC-Action: ' + action + '" '
+ ' -H "X-TC-Timestamp: ' + str(timestamp) + '" '
+ ' -H "X-TC-Version: ' + version + '" '
+ ' -H "X-TC-Region: ' + region + '" '
+ " -d '" + payload + "'")
```

## Golang

```
package main

import (
    "crypto/hmac"
    "crypto/sha256"
    "encoding/hex"
    "fmt"
    "time"
)

func sha256hex(s string) string {
    b := sha256.Sum256([]byte(s))
    return hex.EncodeToString(b[:])
}

func hmacsha256(s, key string) string {
    hashed := hmac.New(sha256.New, []byte(key))
    hashed.Write([]byte(s))
    return string(hashed.Sum(nil))
}

func main() {
    secretId := "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****"
    secretKey := "Gu5t9xGARNpq86cd98joQYCN3*****"
    host := "cvm.tencentcloudapi.com"
    algorithm := "TC3-HMAC-SHA256"
    service := "cvm"
    version := "2017-03-12"
    action := "DescribeInstances"
    region := "ap-guangzhou"
    //var timestamp int64 = time.Now().Unix()
    var timestamp int64 = 1551113065

    // step 1: build canonical request string
    httpRequestMethod := "POST"
    canonicalURI := "/"
    canonicalQueryString := ""
    canonicalHeaders := "content-type:application/json; charset=utf-8\n" + "host:" +
        host + "\n"
    signedHeaders := "content-type;host"
    payload := `{"Limit": 1, "Filters": [{"Values": ["unnamed"], "Name": "instance-na
me"}]}`
    hashedRequestPayload := sha256hex(payload)
    canonicalRequest := fmt.Sprintf("%s\n%s\n%s\n%s\n%s\n%s",
        httpRequestMethod,
        canonicalURI,
```

```
canonicalQueryString,
canonicalHeaders,
signedHeaders,
hashedRequestPayload)
fmt.Println(canonicalRequest)

// step 2: build string to sign
date := time.Unix(timestamp, 0).UTC().Format("2006-01-02")
credentialScope := fmt.Sprintf("%s/%s/tc3_request", date, service)
hashedCanonicalRequest := sha256hex(canonicalRequest)
string2sign := fmt.Sprintf("%s\n%d\n%s\n%s",
algorithm,
timestamp,
credentialScope,
hashedCanonicalRequest)
fmt.Println(string2sign)

// step 3: sign string
secretDate := hmacsha256(date, "TC3"+secretKey)
secretService := hmacsha256(service, secretDate)
secretSigning := hmacsha256("tc3_request", secretService)
signature := hex.EncodeToString([]byte(hmacsha256(string2sign, secretSigning)))
fmt.Println(signature)

// step 4: build authorization
authorization := fmt.Sprintf("%s Credential=%s/%s, SignedHeaders=%s, Signature=%s",
algorithm,
secretId,
credentialScope,
signedHeaders,
signature)
fmt.Println(authorization)

curl := fmt.Sprintf(`curl -X POST https://%s\
-H "Authorization: %s"\
-H "Content-Type: application/json; charset=utf-8"\
-H "Host: %s" -H "X-TC-Action: %s"\
-H "X-TC-Timestamp: %d"\
-H "X-TC-Version: %s"\
-H "X-TC-Region: %s"\
-d '%s'`, host, authorization, host, action, timestamp, version, region, payload)
fmt.Println(curl)
}
```

## PHP



```
<?php
$secretId = "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****";
$secretKey = "Gu5t9xGARNpq86cd98joQYCN3*****";
$host = "cvm.tencentcloudapi.com";
$service = "cvm";
$version = "2017-03-12";
$action = "DescribeInstances";
$region = "ap-guangzhou";
// $timestamp = time();
$timestamp = 1551113065;
$algorithm = "TC3-HMAC-SHA256";

// step 1: build canonical request string
$httpRequestMethod = "POST";
$canonicalUri = "/";
$canonicalQueryString = "";
$canonicalHeaders = "content-type:application/json; charset=utf-8\n"."host:". $host. "\n";
$signedHeaders = "content-type;host";
$payload = '{"Limit": 1, "Filters": [{"Values": ["unnamed"], "Name": "instance-name"}]}';
$hashedRequestPayload = hash("SHA256", $payload);
$canonicalRequest = $httpRequestMethod. "\n"
.$canonicalUri. "\n"
.$canonicalQueryString. "\n"
.$canonicalHeaders. "\n"
.$signedHeaders. "\n"
.$hashedRequestPayload;
echo $canonicalRequest.PHP_EOL;

// step 2: build string to sign
$date = gmdate("Y-m-d", $timestamp);
$credentialScope = $date. "/" . $service. "/tc3_request";
$hashedCanonicalRequest = hash("SHA256", $canonicalRequest);
$stringToSign = $algorithm. "\n"
.$timestamp. "\n"
.$credentialScope. "\n"
.$hashedCanonicalRequest;
echo $stringToSign.PHP_EOL;

// step 3: sign string
$secretDate = hash_hmac("SHA256", $date, "TC3". $secretKey, true);
$secretService = hash_hmac("SHA256", $service, $secretDate, true);
$secretSigning = hash_hmac("SHA256", "tc3_request", $secretService, true);
$signature = hash_hmac("SHA256", $stringToSign, $secretSigning);
echo $signature.PHP_EOL;
```

```
// step 4: build authorization
$authorization = $algorithm
." Credential=".$secretId."/".$credentialScope
.", SignedHeaders=content-type;host, Signature=".$signature;
echo $authorization.PHP_EOL;

$curl = "curl -X POST https://"$.host
.' -H "Authorization: '.$authorization.'"
.' -H "Content-Type: application/json; charset=utf-8"
.' -H "Host: '.$host.'"
.' -H "X-TC-Action: '.$action.'"
.' -H "X-TC-Timestamp: '.$timestamp.'"
.' -H "X-TC-Version: '.$version.'"
.' -H "X-TC-Region: '.$region.'"
." -d "'.$payload.'"";
echo $curl.PHP_EOL;
```

## Ruby

```
# -*- coding: UTF-8 -*-
# require ruby>=2.3.0
require 'digest'
require 'json'
require 'time'
require 'openssl'

# Key Parameters
secret_id = 'AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****'
secret_key = 'Gu5t9xGARNpq86cd98joQYCN3*****'

service = 'cvm'
host = 'cvm.tencentcloudapi.com'
endpoint = 'https://' + host
region = 'ap-guangzhou'
action = 'DescribeInstances'
version = '2017-03-12'
algorithm = 'TC3-HMAC-SHA256'
# timestamp = Time.now.to_i
timestamp = 1551113065
date = Time.at(timestamp).utc.strftime('%Y-%m-%d')

# ***** Step 1: Concatenate the CanonicalRequest string *****
http_request_method = 'POST'
canonical_uri = '/'
canonical_querystring = ''
```

```
canonical_headers = "content-type:application/json; charset=utf-8\nhost:#{host}
\n"
signed_headers = 'content-type;host'
# params = { 'Limit' => 1, 'Filters' => [{ 'Name' => 'instance-name', 'Values' =>
['unnamed'] }] }
# payload = JSON.generate(params, { 'ascii_only' => true, 'space' => ' ' })
# json will generate in random order, to get specified result in example, we hard
-code it here.
payload = '{"Limit": 1, "Filters": [{"Values": ["unnamed"], "Name": "instance-nam
e"}]}'
hashed_request_payload = Digest::SHA256.hexdigest(payload)
canonical_request = [
http_request_method,
canonical_uri,
canonical_querystring,
canonical_headers,
signed_headers,
hashed_request_payload,
].join("\n")

puts canonical_request

# ***** Step 2: Concatenate the string to sign *****
credential_scope = date + '/' + service + '/' + 'tc3_request'
hashed_request_payload = Digest::SHA256.hexdigest(canonical_request)
string_to_sign = [
algorithm,
timestamp.to_s,
credential_scope,
hashed_request_payload,
].join("\n")
puts string_to_sign

# ***** Step 3: Calculate the Signature *****
digest = OpenSSL::Digest.new('sha256')
secret_date = OpenSSL::HMAC.digest(digest, 'TC3' + secret_key, date)
secret_service = OpenSSL::HMAC.digest(digest, secret_date, service)
secret_signing = OpenSSL::HMAC.digest(digest, secret_service, 'tc3_request')
signature = OpenSSL::HMAC.hexdigest(digest, secret_signing, string_to_sign)
puts signature

# ***** Step 4: Concatenate the Authorization *****
authorization = "#{algorithm} Credential=#{secret_id}/#{credential_scope}, Signed
Headers=#{signed_headers}, Signature=#{signature}"
puts authorization

puts 'curl -X POST ' + endpoint \
```

```
+ ' -H "Authorization: ' + authorization + "' ' \
+ ' -H "Content-Type: application/json; charset=utf-8"' \
+ ' -H "Host: ' + host + "' ' \
+ ' -H "X-TC-Action: ' + action + "' ' \
+ ' -H "X-TC-Timestamp: ' + timestamp.to_s + "' ' \
+ ' -H "X-TC-Version: ' + version + "' ' \
+ ' -H "X-TC-Region: ' + region + "' ' \
+ " -d '" + payload + "'"
```

## DotNet

```
using System;
using System.Collections.Generic;
using System.Security.Cryptography;
using System.Text;

public class Application
{
    public static string SHA256Hex(string s)
    {
        using (SHA256 algo = SHA256.Create())
        {
            byte[] hashbytes = algo.ComputeHash(Encoding.UTF8.GetBytes(s));
            StringBuilder builder = new StringBuilder();
            for (int i = 0; i < hashbytes.Length; ++i)
            {
                builder.Append(hashbytes[i].ToString("x2"));
            }
            return builder.ToString();
        }
    }

    public static byte[] HmacSHA256(byte[] key, byte[] msg)
    {
        using (HMACSHA256 mac = new HMACSHA256(key))
        {
            return mac.ComputeHash(msg);
        }
    }

    public static Dictionary<String, String> BuildHeaders(string secretid,
        string secretkey, string service, string endpoint, string region,
        string action, string version, DateTime date, string requestPayload)
    {
        string datestr = date.ToString("yyyy-MM-dd");
        DateTime startTime = new DateTime(1970, 1, 1, 0, 0, 0, 0, DateTimeKind.Utc);
        long requestTimestamp = (long)Math.Round((date - startTime).TotalMilliseconds, Mi
```

```
dpointRounding.AwayFromZero) / 1000;
// ***** Step 1: Concatenate the CanonicalRequest string *****
string algorithm = "TC3-HMAC-SHA256";
string httpRequestMethod = "POST";
string canonicalUri = "/";
string canonicalQueryString = "";
string contentType = "application/json";
string canonicalHeaders = "content-type:" + contentType + "; charset=utf-8\n" +
"host:" + endpoint + "\n";
string signedHeaders = "content-type;host";
string hashedRequestPayload = SHA256Hex(requestPayload);
string canonicalRequest = httpRequestMethod + "\n"
+ canonicalUri + "\n"
+ canonicalQueryString + "\n"
+ canonicalHeaders + "\n"
+ signedHeaders + "\n"
+ hashedRequestPayload;
Console.WriteLine(canonicalRequest);
Console.WriteLine("-----");

// ***** Step 2: Concatenate the string to sign *****
string credentialScope = datestr + "/" + service + "/" + "tc3_request";
string hashedCanonicalRequest = SHA256Hex(canonicalRequest);
string stringToSign = algorithm + "\n" + requestTimestamp.ToString() + "\n" + cre
dentialScope + "\n" + hashedCanonicalRequest;
Console.WriteLine(stringToSign);
Console.WriteLine("-----");

// ***** Step 3: Calculate the signature *****
byte[] tc3SecretKey = Encoding.UTF8.GetBytes("TC3" + secretkey);
byte[] secretDate = HmacSHA256(tc3SecretKey, Encoding.UTF8.GetBytes(datestr));
byte[] secretService = HmacSHA256(secretDate, Encoding.UTF8.GetBytes(service));
byte[] secretSigning = HmacSHA256(secretService, Encoding.UTF8.GetBytes("tc3_requ
est"));
byte[] signatureBytes = HmacSHA256(secretSigning, Encoding.UTF8.GetBytes(stringTo
Sign));
string signature = BitConverter.ToString(signatureBytes).Replace("-", "").ToLower
();
Console.WriteLine(signature);
Console.WriteLine("-----");

// ***** Step 4: Concatenate the Authorization *****
string authorization = algorithm + " "
+ "Credential=" + secretid + "/" + credentialScope + ", "
+ "SignedHeaders=" + signedHeaders + ", "
+ "Signature=" + signature;
Console.WriteLine(authorization);
```

```
Console.WriteLine("-----");

Dictionary<string, string> headers = new Dictionary<string, string>();
headers.Add("Authorization", authorization);
headers.Add("Host", endpoint);
headers.Add("Content-Type", contentType + "; charset=utf-8");
headers.Add("X-TC-Timestamp", requestTimestamp.ToString());
headers.Add("X-TC-Version", version);
headers.Add("X-TC-Action", action);
headers.Add("X-TC-Region", region);
return headers;
}

public static void Main(string[] args)
{
    // SecretID and SecretKey
    string SECRET_ID = "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****";
    string SECRET_KEY = "Gu5t9xGARNpq86cd98joQYCN3*****";

    string service = "cvm";
    string endpoint = "cvm.tencentcloudapi.com";
    string region = "ap-guangzhou";
    string action = "DescribeInstances";
    string version = "2017-03-12";

    // The timestamp `2019-02-26 00:44:25` used here is only for reference. In a project, use the following parameter:
    // DateTime date = DateTime.UtcNow;
    // Enter the correct time zone. We recommend using UTC timestamp to avoid errors.
    DateTime date = new DateTime(1970, 1, 1, 0, 0, 0, 0, DateTimeKind.Utc).AddSeconds(1551113065);
    string requestPayload = "{\"Limit\": 1, \"Filters\": [{\"Values\": [\"\\u672a\\u547d\\u540d\"], \"Name\": \"instance-name\"}]\"}";

    Dictionary<string, string> headers = BuildHeaders(SECRET_ID, SECRET_KEY, service, endpoint, region, action, version, date, requestPayload);

    Console.WriteLine("POST https://cvm.tencentcloudapi.com");
    foreach (KeyValuePair<string, string> kv in headers)
    {
        Console.WriteLine(kv.Key + ": " + kv.Value);
    }
    Console.WriteLine();
    Console.WriteLine(requestPayload);
}
}
```

## NodeJS

```
const crypto = require('crypto');

function sha256(message, secret = '', encoding) {
  const hmac = crypto.createHmac('sha256', secret)
  return hmac.update(message).digest(encoding)
}

function getHash(message, encoding = 'hex') {
  const hash = crypto.createHash('sha256')
  return hash.update(message).digest(encoding)
}

function getDate(timestamp) {
  const date = new Date(timestamp * 1000)
  const year = date.getUTCFullYear()
  const month = ('0' + (date.getUTCMonth() + 1)).slice(-2)
  const day = ('0' + date.getUTCDate()).slice(-2)
  return `${year}-${month}-${day}`
}

function main(){

const SECRET_ID = "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****"
const SECRET_KEY = "Gu5t9xGARNpq86cd98joQYCN3*****"

const endpoint = "cvm.tencentcloudapi.com"
const service = "cvm"
const region = "ap-guangzhou"
const action = "DescribeInstances"
const version = "2017-03-12"
//const timestamp = getTime()
const timestamp = 1551113065
const date = getDate(timestamp)

// ***** Step 1: Concatenate the CanonicalRequest string *****
const signedHeaders = "content-type;host"

const payload = "{\"Limit\": 1, \"Filters\": [{\"Values\": [\"unnamed\"], \"Name\": \"instance-name\"}]}"

const hashedRequestPayload = getHash(payload);
const httpRequestMethod = "POST"
const canonicalUri = "/"
const canonicalQueryString = ""
const canonicalHeaders = "content-type:application/json; charset=utf-8\n" + "host:" + endpoint + "\n"

const canonicalRequest = httpRequestMethod + "\n"
```

```

+ canonicalUri + "\n"
+ canonicalQueryString + "\n"
+ canonicalHeaders + "\n"
+ signedHeaders + "\n"
+ hashedRequestPayload
console.log(canonicalRequest)
console.log("-----")

// ***** Step 2: Concatenate the string to sign *****
const algorithm = "TC3-HMAC-SHA256"
const hashedCanonicalRequest = getHash(canonicalRequest);
const credentialScope = date + "/" + service + "/" + "tc3_request"
const stringToSign = algorithm + "\n" +
timestamp + "\n" +
credentialScope + "\n" +
hashedCanonicalRequest
console.log(stringToSign)
console.log("-----")

// ***** Step 3: Calculate the signature *****
const kDate = sha256(date, 'TC3' + SECRET_KEY)
const kService = sha256(service, kDate)
const kSigning = sha256('tc3_request', kService)
const signature = sha256(stringToSign, kSigning, 'hex')
console.log(signature)
console.log("-----")

// ***** Step 4: Concatenate the Authorization *****
const authorization = algorithm + " " +
"Credential=" + SECRET_ID + "/" + credentialScope + ", " +
"SignedHeaders=" + signedHeaders + ", " +
"Signature=" + signature
console.log(authorization)
console.log("-----")

const Call_Information = 'curl -X POST ' + "https://" + endpoint
+ ' -H "Authorization: ' + authorization + '"'
+ ' -H "Content-Type: application/json; charset=utf-8"'
+ ' -H "Host: ' + endpoint + '"'
+ ' -H "X-TC-Action: ' + action + '"'
+ ' -H "X-TC-Timestamp: ' + timestamp.toString() + '"'
+ ' -H "X-TC-Version: ' + version + '"'
+ ' -H "X-TC-Region: ' + region + '"'
+ " -d '" + payload + '"'
console.log(Call_Information)
}
main()
    
```



## C++

```
#include <iostream>
#include <iomanip>
#include <sstream>
#include <string>
#include <stdio.h>
#include <time.h>
#include <openssl/sha.h>
#include <openssl/hmac.h>

using namespace std;

string get_data(int64_t &timestamp)
{
    string utcDate;
    char buff[20] = {0};
    // time_t timenow;
    struct tm sttime;
    sttime = *gmtime(&timestamp);
    strftime(buff, sizeof(buff), "%Y-%m-%d", &sttime);
    utcDate = string(buff);
    return utcDate;
}

string int2str(int64_t n)
{
    std::stringstream ss;
    ss << n;
    return ss.str();
}

string sha256Hex(const string &str)
{
    char buf[3];
    unsigned char hash[SHA256_DIGEST_LENGTH];
    SHA256_CTX sha256;
    SHA256_Init(&sha256);
    SHA256_Update(&sha256, str.c_str(), str.size());
    SHA256_Final(hash, &sha256);
    std::string NewString = "";
    for(int i = 0; i < SHA256_DIGEST_LENGTH; i++)
    {
        sprintf(buf, sizeof(buf), "%02x", hash[i]);
        NewString = NewString + buf;
    }
    return NewString;
}
```

```
}
string HmacSha256(const string &key, const string &input)
{
    unsigned char hash[32];

    HMAC_CTX *h;
    #if OPENSSSL_VERSION_NUMBER < 0x10100000L
    HMAC_CTX hmac;
    HMAC_CTX_init(&hmac);
    h = &hmac;
    #else
    h = HMAC_CTX_new();
    #endif

    HMAC_Init_ex(h, &key[0], key.length(), EVP_sha256(), NULL);
    HMAC_Update(h, ( unsigned char* )&input[0], input.length());
    unsigned int len = 32;
    HMAC_Final(h, hash, &len);

    #if OPENSSSL_VERSION_NUMBER < 0x10100000L
    HMAC_CTX_cleanup(h);
    #else
    HMAC_CTX_free(h);
    #endif

    std::stringstream ss;
    ss << std::setfill('0');
    for (int i = 0; i < len; i++)
    {
        ss << hash[i];
    }

    return (ss.str());
}
string HexEncode(const string &input)
{
    static const char* lut = "0123456789abcdef";
    size_t len = input.length();

    string output;
    output.reserve(2 * len);
    for (size_t i = 0; i < len; ++i)
    {
        const unsigned char c = input[i];
        output.push_back(lut[c >> 4]);
        output.push_back(lut[c & 15]);
    }
}
```

```
return output;
}

int main()
{
string SECRET_ID = "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****";
string SECRET_KEY = "Gu5t9xGARNpq86cd98joQYCN3*****";

string service = "cvm";
string host = "cvm.tencentcloudapi.com";
string region = "ap-guangzhou";
string action = "DescribeInstances";
string version = "2017-03-12";
int64_t timestamp = 1551113065;
string date = get_data(timestamp);

// ***** Step 1: Concatenate the CanonicalRequest string *****
string httpRequestMethod = "POST";
string canonicalUri = "/";
string canonicalQueryString = "";
string canonicalHeaders = "content-type:application/json; charset=utf-8\nhost:" +
host + "\n";
string signedHeaders = "content-type;host";
string payload = "{\"Limit\": 1, \"Filters\": [{\"Values\": [\"unnamed\"], \"Name\": \"instance-name\"}] }";
string hashedRequestPayload = sha256Hex(payload);
string canonicalRequest = httpRequestMethod + "\n" + canonicalUri + "\n" + canonicalQueryString + "\n"
+ canonicalHeaders + "\n" + signedHeaders + "\n" + hashedRequestPayload;
cout << canonicalRequest << endl;
cout << "-----" << endl;

// ***** Step 2: Concatenate the string to sign *****
string algorithm = "TC3-HMAC-SHA256";
string RequestTimestamp = int2str(timestamp);
string credentialScope = date + "/" + service + "/" + "tc3_request";
string hashedCanonicalRequest = sha256Hex(canonicalRequest);
string stringToSign = algorithm + "\n" + RequestTimestamp + "\n" + credentialScope + "\n" + hashedCanonicalRequest;
cout << stringToSign << endl;
cout << "-----" << endl;

// ***** Step 3: Calculate the signature *****
string kKey = "TC3" + SECRET_KEY;
string kDate = HmacSha256(kKey, date);
string kService = HmacSha256(kDate, service);
string kSigning = HmacSha256(kService, "tc3_request");
```

```

string signature = HexEncode(HmacSha256(kSigning, stringToSign));
cout << signature << endl;
cout << "-----" << endl;

// ***** Step 4: Concatenate the Authorization *****
string authorization = algorithm + " " + "Credential=" + SECRET_ID + "/" + creden
tialScope + ", "
+ "SignedHeaders=" + signedHeaders + ", " + "Signature=" + signature;
cout << authorization << endl;
cout << "-----" << endl;

string headers = "curl -X POST https://" + host + "\n"
+ " -H \"Authorization: \" + authorization + "\n"
+ " -H \"Content-Type: application/json; charset=utf-8\" + "\n"
+ " -H \"Host: \" + host + "\n"
+ " -H \"X-TC-Action: \" + action + "\n"
+ " -H \"X-TC-Timestamp: \" + RequestTimestamp + "\n"
+ " -H \"X-TC-Version: \" + version + "\n"
+ " -H \"X-TC-Region: \" + region + "\n"
+ " -d '" + payload;
cout << headers << endl;
return 0;
};

```

## Signature Failure

The following situational error codes for signature failure may occur. Please resolve the errors accordingly.

Error Code	Description
AuthFailure.SignatureExpire	Signature expired. Timestamp and server time cannot differ by more than five minutes.
AuthFailure.SecretIdNotFound	The key does not exist. Please go to the console to check whether it is disabled or you copied fewer or more characters.
AuthFailure.SignatureFailure	Signature error. It is possible that the signature was calculated incorrectly, the signature does not match the content actually sent, or the SecretKey is incorrect.
AuthFailure.TokenFailure	Temporary certificate token error.
AuthFailure.InvalidSecretId	Invalid key (not a TencentCloud API key type).

# Signature

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Tencent Cloud API authenticates each access request, i.e. each request needs to include authentication information (Signature) in the common parameters to verify the identity of the requester.

The Signature is generated by the security credentials which include SecretId and SecretKey. If you don't have the security credentials yet, go to the [TencentCloud API Key](#) page to apply for them; otherwise, you cannot invoke the TencentCloud API.

## 1. Applying for Security Credentials

Before using the TencentCloud API for the first time, go to the [TencentCloud API Key](#) page to apply for security credentials.

Security credentials consist of SecretId and SecretKey:

- SecretId is used to identify the API requester.
- SecretKey is used to encrypt the signature string and verify it on the server.
- **You must keep your security credentials private and avoid disclosure.**

You can apply for the security credentials through the following steps:

1. Log in to the [Tencent Cloud Console](#).
2. Go to the [TencentCloud API Key](#) page.
3. On the [API Key Management](#) page, click **Create Key** to create a SecretId/SecretKey pair.

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

## 2. Generating a Signature

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

Assume that the SecretId and SecretKey are:

- SecretId: AKIDz8krbsJ5yKBZQpn74WFkmLPx3\*\*\*\*\*
- SecretKey: Gu5t9xGARNpq86cd98joQYCN3\*\*\*\*\*

**Note: This is just an example. For actual operations, please use your own SecretId and SecretKey.**

Take the Cloud Virtual Machine's request to view the instance list (DescribeInstances) as an example. When you invoke this API, the request parameters may be as follows:

Parameter name	Description	Parameter value
Action	Method name	DescribeInstances
SecretId	Key ID	AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****
Timestamp	Current timestamp	1465185768
Nonce	Random positive integer	11886
Region	Region where the instance is located	ap-guangzhou
InstanceIds.0	ID of the instance to query	ins-09dx96dg
Offset	Offset	0
Limit	Allowed maximum output	20
Version	API version number	2017-03-12

## 2.1. Sorting 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:

```
{
  'Action' : 'DescribeInstances',
  'InstanceIds.0' : 'ins-09dx96dg',
  'Limit' : 20,
  'Nonce' : 11886,
  'Offset' : 0,
  'Region' : 'ap-guangzhou',
  'SecretId' : 'AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****',
  'Timestamp' : 1465185768,
  'Version' : '2017-03-12',
}
```

When developing in another programming language, you can sort these sample parameters and it will work as long as you obtain the same results.

## 2.2. Concatenating a Request String

This step generates a request string.

Format the request parameters sorted in the previous step into the form of "parameter name"="parameter value". For example, for the Action parameter, its parameter name is "Action" and its parameter value is "DescribeInstances", so it will become Action=DescribeInstances after formatted.

**Note: The "parameter value" is the original value but not the value after URL encoding.**

Then, concatenate the formatted parameters with "&". The resulting request string is as follows:

```
Action=DescribeInstances&InstanceIds.0=ins-09dx96dg&Limit=20&Nonce=11886&Offset=0
&Region=ap-guangzhou&SecretId=AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****&Timestamp=1465
185768&Version=2017-03-12
```

## 2.3. Concatenating the Signature Original String

This step generates a signature original string.

The signature original string consists of the following parameters:

1. HTTP method: POST and GET modes are supported, and GET is used here for the request. Please note that the method name should be in all capital letters.
2. Request server: the domain name of the request to view the list of instances (DescribeInstances) is cvm.tencentcloudapi.com. The actual request domain name varies by the module to which the API belongs. For more information, see the instructions of the specific API.
3. Request path: The request path in the current version of TencentCloud API is fixed to /.
4. Request string: the request string generated in the previous step.

The concatenation rule of the signature original string is: Request method + request host + request path + ? + request string

The concatenation result of the example is:

```
GETcvm.tencentcloudapi.com/?Action=DescribeInstances&InstanceIds.0=ins-09dx96dg&L
imit=20&Nonce=11886&Offset=0&Region=ap-guangzhou&SecretId=AKIDz8krbsJ5yKBZQpn74WF
kmLPx3*****&Timestamp=1465185768&Version=2017-03-12
```

## 2.4. Generating a Signature String

This step generates a signature string.

First, use the HMAC-SHA1 algorithm to sign the **signature original string** obtained in the previous step, and then

encode the generated signature using Base64 to obtain the final signature.

The specific code is as follows with the PHP language being used as an example:

```
$secretKey = 'Gu5t9xGARNpq86cd98joQYCN3*****';

```

The final signature is:

```
zmmjn35mikh6pM3V7sUEuX4wyYM=
```

When developing in another programming language, you can sign and verify the original in the example above and it works as long as you get the same results.

### 3. Encoding a Signature String

The generated signature string cannot be directly used as a request parameter and must be URL encoded.

For example, if the signature string generated in the previous step is `zmmjn35mikh6pM3V7sUEuX4wyYM=`, the final signature string request parameter (Signature) is `zmmjn35mikh6pM3V7sUEuX4wyYM%3D`, which will be used to generate the final request URL.

**Note: If your request method is GET, or the request method is POST and the Content-Type is `application/x-www-form-urlencoded`, then all the request parameter values need to be URL encoded (except the parameter key and the symbol of =) when sending the request. Non-ASCII characters need to be encoded with UTF-8 before URL encoding.**

**Note: The network libraries of some programming languages automatically URL encode all parameters, in which case there is no need to URL encode the signature string; otherwise, two rounds of URL encoding will cause the signature to fail.**

**Note: Other parameter values also need to be encoded using [RFC 3986](#). Use %XY in percent-encoding for special characters such as Chinese characters, where "X" and "Y" are hexadecimal characters (0-9 and uppercase A-F), and using lowercase will cause an error.**

### 4. Signature Failure



The following situational error codes for signature failure may occur. Please resolve the errors accordingly.

Error code	Error description
AuthFailure.SignatureExpire	The signature is expired
AuthFailure.SecretIdNotFound	The key does not exist
AuthFailure.SignatureFailure	Signature error
AuthFailure.TokenFailure	Token error
AuthFailure.InvalidSecretId	Invalid key (not a TencentCloud API key type)

## 5. Signature Demo

When calling API 3.0, you are recommended to use the corresponding Tencent Cloud SDK 3.0 which encapsulates the signature process, enabling you to focus on only the specific APIs provided by the product when developing. See [SDK Center](#) for more information. Currently, the following programming languages are supported:

- [Python](#)
- [Java](#)
- [PHP](#)
- [Go](#)
- [NodeJS](#)
- [.NET](#)

To further explain the signing process, we will use a programming language to implement the process described above. The request domain name, API and parameter values in the sample are used here. This goal of this example is only to provide additional clarification for the signature process, please see the SDK for actual usage.

The final output URL might be: `https://cvm.tencentcloudapi.com/?Action=DescribeInstances&InstanceIds.0=ins-09dx96dg&Limit=20&Nonce=11886&Offset=0&Region=ap-guangzhou&SecretId=AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****&Signature=zmmjn35mikh6pM3V7sUEuX4wyYM%3D&Timestamp=1465185768&Version=2017-03-12` .

Note: The key in the example is fictitious, and the timestamp is not the current time of the system, so if this URL is opened in the browser or called using commands such as curl, an authentication error will be returned: Signature expired. In order to get a URL that can work properly, you need to replace the SecretId and SecretKey in the example with your real credentials and use the current time of the system as the Timestamp.

Note: In the example below, even if you use the same programming language, the order of the parameters in the URL may be different for each execution. However, the order does not matter, as long as all the parameters are included in the URL and the signature is calculated correctly.

Note: The following code is only applicable to API 3.0. It cannot be directly used in other signature processes. Even with an older API, signature calculation errors may occur due to the differences in details. Please refer to the corresponding documentation.

## 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/?");
        // When signing, the parameters need to be sorted in lexicographical order. TreeMap
        // is used here to guarantee the correct order.
        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 the parameters in the actual request
        // URL.
        for (String k : params.keySet()) {
```

```
// The request string needs to be URL encoded. As the Key is all in English letters, only the value is URL encoded here.
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 enables automatic sorting
    // A random number should be used when actually calling, for example: params.put("Nonce", new Random().nextInt(Integer.MAX_VALUE));
    params.put("Nonce", 11886); // Common parameter
    // The current time of the system should be used when actually calling, for example: params.put("Timestamp", System.currentTimeMillis() / 1000);
    params.put("Timestamp", 1465185768); // Common parameter
    params.put("SecretId", "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****"); // Common parameter
    params.put("Action", "DescribeInstances"); // Common parameter
    params.put("Version", "2017-03-12"); // Common parameter
    params.put("Region", "ap-guangzhou"); // Common parameter
    params.put("Limit", 20); // Business parameter
    params.put("Offset", 0); // Business parameter
    params.put("InstanceIds.0", "ins-09dx96dg"); // Business parameter
    params.put("Signature", sign(getStringToSign(params), "Gu5t9xGARNpq86cd98joQYCN3*****", "HmacSHA1")); // Common parameter
    System.out.println(getUrl(params));
}
}
```

## Python

Note: If running in a Python 2 environment, the following requests dependency package must be installed first: `pip`

`install requests`.

```
# -*- coding: utf8 -*-
import base64
import hashlib
import hmac
import time

import requests

secret_id = "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****"
secret_key = "Gu5t9xGARNpq86cd98joQYCN3*****"
```

```
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"])
    # An actual invocation would occur here, which may incur fees after success
    # resp = requests.get("https://" + endpoint, params=data)
    # print(resp.url)
```

## Golang

```
package main

import (
    "bytes"
    "crypto/hmac"
    "crypto/sha1"
    "encoding/base64"
    "fmt"
    "sort"
)

func main() {
    secretId := "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****"
    secretKey := "Gu5t9xGARNpq86cd98joQYCN3*****"
```

```
params := map[string]string{
    "Nonce": "11886",
    "Timestamp": "1465185768",
    "Region": "ap-guangzhou",
    "SecretId": secretId,
    "Version": "2017-03-12",
    "Action": "DescribeInstances",
    "InstanceIds.0": "ins-09dx96dg",
    "Limit": "20",
    "Offset": "0",
}

var buf bytes.Buffer
buf.WriteString("GET")
buf.WriteString("cvm.tencentcloudapi.com")
buf.WriteString("/")
buf.WriteString("?")

// sort keys by ascii asc order
keys := make([]string, 0, len(params))
for k, _ := range params {
    keys = append(keys, k)
}
sort.Strings(keys)

for i := range keys {
    k := keys[i]
    buf.WriteString(k)
    buf.WriteString("=")
    buf.WriteString(params[k])
    buf.WriteString("&")
}
buf.Truncate(buf.Len() - 1)

hashed := hmac.New(sha1.New, []byte(secretKey))
hashed.Write(buf.Bytes())

fmt.Println(base64.StdEncoding.EncodeToString(hashed.Sum(nil)))
}
```

## PHP

```
<?php
$secretId = "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****";
$secretKey = "Gu5t9xGARNpq86cd98joQYCN3*****";
$params["Nonce"] = 11886;//rand();
```

```
$param["Timestamp"] = 1465185768;//time();
$params["Region"] = "ap-guangzhou";
$params["SecretId"] = $secretId;
$params["Version"] = "2017-03-12";
$params["Action"] = "DescribeInstances";
$params["InstanceIds.0"] = "ins-09dx96dg";
$params["Limit"] = 20;
$params["Offset"] = 0;

ksort($param);

$signStr = "GETcvm.tencentcloudapi.com/?";
foreach ($param as $key => $value) {
    $signStr = $signStr . $key . "=" . $value . "&";
}
$signStr = substr($signStr, 0, -1);

$signature = base64_encode(hash_hmac("sha1", $signStr, $secretKey, true));
echo $signature.PHP_EOL;
// need to install and enable curl extension in php.ini
// $params["Signature"] = $signature;
// $url = "https://cvm.tencentcloudapi.com/?".http_build_query($param);
// echo $url.PHP_EOL;
// $ch = curl_init();
// curl_setopt($ch, CURLOPT_URL, $url);
// $output = curl_exec($ch);
// curl_close($ch);
// echo json_decode($output);
```

## Ruby

```
# -*- coding: UTF-8 -*-
# require ruby>=2.3.0
require 'time'
require 'openssl'
require 'base64'

secret_id = "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****"
secret_key = "Gu5t9xGARNpq86cd98joQYCN3*****"

method = 'GET'
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, # Time.now.to_i
'Version' => '2017-03-12',
}
sign = method + endpoint + '/?'
params = []
data.sort.each do |item|
  params << "#{item[0]}=#{item[1]}"
end
sign += params.join('&')
digest = OpenSSL::Digest.new('sha1')
data['Signature'] = Base64.encode64(OpenSSL::HMAC.digest(digest, secret_key, sign))
puts data['Signature']

# require 'net/http'
# uri = URI('https://' + endpoint)
# uri.query = URI.encode_www_form(data)
# p uri
# res = Net::HTTP.get_response(uri)
# puts res.body
```

## DotNet

```
using System;
using System.Collections.Generic;
using System.Net;
using System.Security.Cryptography;
using System.Text;

public class Application {
  public static string Sign(string signKey, string secret)
  {
    string signRet = string.Empty;
    using (HMACSHA1 mac = new HMACSHA1(Encoding.UTF8.GetBytes(signKey)))
    {
      byte[] hash = mac.ComputeHash(Encoding.UTF8.GetBytes(secret));
      signRet = Convert.ToBase64String(hash);
    }
    return signRet;
  }

  public static string MakeSignPlainText(SortedDictionary<string, string> requestParams, string requestMethod, string requestHost, string requestPath)
```

```
{
    string retStr = "";
    retStr += requestMethod;
    retStr += requestHost;
    retStr += requestPath;
    retStr += "?";
    string v = "";
    foreach (string key in requestParams.Keys)
    {
        v += string.Format("{0}={1}&", key, requestParams[key]);
    }
    retStr += v.TrimEnd('&');
    return retStr;
}

public static void Main(string[] args)
{
    string SECRET_ID = "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****";
    string SECRET_KEY = "Gu5t9xGARNpq86cd98joQYCN3*****";

    string endpoint = "cvm.tencentcloudapi.com";
    string region = "ap-guangzhou";
    string action = "DescribeInstances";
    string version = "2017-03-12";
    double RequestTimestamp = 1465185768;
    // long timestamp = ToTimestamp() / 1000;
    // string requestTimestamp = timestamp.ToString();
    Dictionary<string, string> param = new Dictionary<string, string>();
    param.Add("Limit", "20");
    param.Add("Offset", "0");
    param.Add("InstanceIds.0", "ins-09dx96dg");
    param.Add("Action", action);
    param.Add("Nonce", "11886");
    // param.Add("Nonce", Math.Abs(new Random().Next()).ToString());

    param.Add("Timestamp", RequestTimestamp.ToString());
    param.Add("Version", version);

    param.Add("SecretId", SECRET_ID);
    param.Add("Region", region);
    SortedDictionary<string, string> headers = new SortedDictionary<string, string>(p
aram, StringComparer.Ordinal);
    string sigInParam = MakeSignPlainText(headers, "GET", endpoint, "/");
    Console.WriteLine(sigInParam);
    string sigOutParam = Sign(SECRET_KEY, sigInParam);
```



```
Console.WriteLine("GET https://cvm.tencentcloudapi.com");
foreach (KeyValuePair<string, string> kv in headers)
{
    Console.WriteLine(kv.Key + ": " + kv.Value);
}
Console.WriteLine("Signature" + ": " + WebUtility.UrlEncode(sigOutParam));
Console.WriteLine();

string result = "https://cvm.tencentcloudapi.com/?";
foreach (KeyValuePair<string, string> kv in headers)
{
    result += WebUtility.UrlEncode(kv.Key) + "=" + WebUtility.UrlEncode(kv.Value) +
"&";
}
result += WebUtility.UrlEncode("Signature") + "=" + WebUtility.UrlEncode(sigOutPa
ram);
Console.WriteLine("GET " + result);
}
}
```

## NodeJS

```
const crypto = require('crypto');

function get_req_url(params, endpoint){
    params['Signature'] = escape(params['Signature']);
    const url_strParam = sort_params(params)
    return "https://" + endpoint + "/" + url_strParam.slice(1);
}

function formatSignString(reqMethod, endpoint, path, strParam){
    let strSign = reqMethod + endpoint + path + "?" + strParam.slice(1);
    return strSign;
}

function sha1(secretKey, strsign){
    let signMethodMap = {'HmacSHA1': "sha1"};
    let hmac = crypto.createHmac(signMethodMap['HmacSHA1'], secretKey || "");
    return hmac.update(Buffer.from(strsign, 'utf8')).digest('base64')
}

function sort_params(params) {
    let strParam = "";
    let keys = Object.keys(params);
    keys.sort();
    for (let k in keys) {
        //k = k.replace(/_/g, '.');
    }
}
```

```
strParam += ("%&" + keys[k] + "=" + params[keys[k]]);
}
return strParam
}

function main(){
const SECRET_ID = "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****"
const SECRET_KEY = "Gu5t9xGARNpq86cd98joQYCN3*****"

const endpoint = "cvm.tencentcloudapi.com"
const Region = "ap-guangzhou"
const Version = "2017-03-12"
const Action = "DescribeInstances"
const Timestamp = 1465185768
// const Timestamp = Math.round(Date.now() / 1000)
const Nonce = 11886
//const nonce = Math.round(Math.random() * 65535)

let params = {};
params['Action'] = Action;
params['InstanceIds.0'] = 'ins-09dx96dg';
params['Limit'] = 20;
params['Offset'] = 0;
params['Nonce'] = Nonce;
params['Region'] = Region;
params['SecretId'] = SECRET_ID;
params['Timestamp'] = Timestamp;
params['Version'] = Version;

strParam = sort_params(params)

const reqMethod = "GET";
const path = "/";
strSign = formatSignString(reqMethod, endpoint, path, strParam)
console.log(strSign)
console.log("-----")

params['Signature'] = sha1(SECRET_KEY, strSign)
console.log(params['Signature'])
console.log("-----")

const req_url = get_req_url(params, endpoint)
console.log(params['Signature'])
console.log("-----")
console.log(req_url)
}
main()
```



# Responses

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## Response for Successful Requests

For example, when calling CAM API (version: 2017-03-12) to view the status of instances (DescribeInstancesStatus), if the request has succeeded, you may see the response as shown below:

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

- The API will return `Response`, which contains `RequestId`, as long as it processes the request. It does not matter if the request is successful or not.
- `RequestId` is the unique ID of an API request. Contact us with this ID when an exception occurs.
- Except for the fixed fields, all fields are action-specified. For the definitions of action-specified fields, see the corresponding API documentation. In this example, `TotalCount` and `InstanceStatusSet` are the fields specified by the API `DescribeInstancesStatus`. `0` `TotalCount` means that the requester owns 0 CVM instance so the `InstanceStatusSet` is empty.

## Response for Failed Requests

If the request has failed, you may see the response as shown below:

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

- The presence of the `Error` field indicates that the request has failed. A response for a failed request will include `Error`, `Code` and `Message` fields.
- `Code` is the code of the error that helps you identify the cause and solution. There are two types of error codes so you may find the code in either common error codes or API-specified error codes.
- `Message` explains the cause of the error. Note that the returned messages are subject to service updates. The information the messages provide may not be up-to-date and should not be the only source of reference.
- `RequestId` is the unique ID of an API request. Contact us with this ID when an exception occurs.

## Common Error Codes

If there is an `Error` field in the response, it means that the API call failed. The `Code` field in `Error` indicates the error code. The following table lists the common error codes that all actions can return.

Error Code	Description
<code>AuthFailure.InvalidSecretId</code>	Invalid key (not a TencentCloud API key type).
<code>AuthFailure.MFAFailure</code>	MFA failed.
<code>AuthFailure.SecretIdNotFound</code>	The key does not exist.
<code>AuthFailure.SignatureExpire</code>	Signature expired.
<code>AuthFailure.SignatureFailure</code>	Signature error.
<code>AuthFailure.TokenFailure</code>	Token error.
<code>AuthFailure.UnauthorizedOperation</code>	The request does not have CAM authorization.
<code>DryRunOperation</code>	DryRun Operation. It means that the request would have succeeded, but the <code>DryRun</code> parameter was used.
<code>FailedOperation</code>	Operation failed.
<code>InternalError</code>	Internal error.
<code>InvalidAction</code>	The API does not exist.
<code>InvalidParameter</code>	Incorrect parameter.
<code>InvalidParameterValue</code>	Invalid parameter value.
<code>LimitExceeded</code>	Quota limit exceeded.
<code>MissingParameter</code>	A parameter is missing.

NoSuchVersion	The API version does not exist.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	Resource is in use.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	Resource is unavailable.
UnauthorizedOperation	Unauthorized operation.
UnknownParameter	Unknown parameter.
UnsupportedOperation	Unsupported operation.
UnsupportedProtocol	HTTPS request method error. Only GET and POST requests are supported.
UnsupportedRegion	API does not support the requested region.

# Instance APIs

## DescribeDBInstanceHAConfig

最近更新时间：2023-10-13 09:42:55

### 1. API Description

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

This API is used to query the HA configuration of an instance, which includes:

- Allow a standby node to promote to a primary node.
- Allow a semi-sync instance to adopt sync or async replication.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

### 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeDBInstanceHAConfig.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceId	Yes	String	Instance ID

### 3. Output Parameters

Parameter Name	Type	Description
SyncMode	String	<p>Primary-standby sync mode. Valid values:</p> <ul style="list-style-type: none"> <li><code>Semi-sync</code></li> <li><code>Async</code></li> </ul>
MaxStandbyLatency	Integer	<p>Maximum data lag for high-availability standby server. The standby node can be promoted to the primary node when its data lag and the delay time are both less than the value of <code>MaxStandbyLatency</code> and <code>MaxStandbyLag</code> respectively.</p> <ul style="list-style-type: none"> <li>Unit: byte</li> <li>Value range: 1073741824-322122547200</li> </ul>
MaxStandbyLag	Integer	<p>The maximum delay for high-availability standby server. The standby node can be promoted to the primary node when its data lag and the delay time are both less than or equals to the value of <code>MaxStandbyLatency</code> and <code>MaxStandbyLag</code> respectively.</p> <ul style="list-style-type: none"> <li>Unit: s</li> <li>Value range: 5-10</li> </ul>
MaxSyncStandbyLatency	Integer	<p>Maximum data sync lag for u200du200dstandby server. If data lag of the standby node and the delay time are both less than or equals to the values of <code>MaxSyncStandbyLatency</code> and <code>MaxSyncStandbyLag</code> respectively, the standby server adopts semi-sync replication; if not, it adopts async replication. This value is only valid for the instance with <code>SyncMode</code> set to <code>Semi-sync</code>.</p> <p>This field returns null for async instance and semi-sync (non-downgradable to async) instance.</p> <p>Note: u200dThis field may return null, indicating that no valid values can be obtained.</p>
MaxSyncStandbyLag	Integer	<p>Maximum sync delay time for u200dstandby server. If the delay time for u200dstandby server and the data lag are both less than or equals to the values of <code>MaxSyncStandbyLag</code> and <code>MaxSyncStandbyLatency</code> respectively, the standby server adopts sync replication mode; if not, it adopts async replication. This value is only valid for the instance with <code>SyncMode</code> set to <code>Semi-sync</code>.</p> <p>This field will not return for async instance and semi-sync (non-downgradable to async) instance.</p> <p>Note: u200dThis field may return null, indicating that no valid values can be obtained.</p>
RequestId	String	The unique request ID, which is returned for each request. RequestId is



required for locating a problem.

## 4. Example

### Example1 Querying the HA configuration of the instance that adopts the semi-sync (downgradable to async) replication

This example shows you how to query the HA configuration by ID of the instance that adopts semi-sync (downgradable to async) replication.

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeDBInstanceHAConfig
<Common request parameters>

{
  "DBInstanceId": "postgres-32d4mmv9"
}
```

#### Output Example

```
{
  "Response": {
    "MaxStandbyLag": 10,
    "MaxStandbyLatency": 10737418240,
    "MaxSyncStandbyLag": 5,
    "MaxSyncStandbyLatency": 1073741824,
    "RequestId": "897783db-0451-479b-a205-b2b0e48d29a8",
    "SyncMode": "Semi-sync"
  }
}
```

### Example2 Querying the HA configuration of the instance that adopts the async replication

This example shows you how to query the HA configuration by ID of the instance that adopts async replication.

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeDBInstanceHAConfig
<Common request parameters>

{
  "DBInstanceId": "postgres-32d4mmv9"
}
```

## Output Example

```
{
  "Response": {
    "MaxStandbyLag": 10,
    "MaxStandbyLatency": 10737418240,
    "MaxSyncStandbyLag": null,
    "MaxSyncStandbyLatency": null,
    "RequestId": "730627a4-547d-422b-8aac-239041b12212",
    "SyncMode": "Async"
  }
}
```

## Example3 Querying the HA configuration of the instance that adopts the semi-sync (non-downgradable to async) replication

This example shows you how to query the HA configuration by ID of the instance that adopts semi-sync (non-downgradable to async) replication.

## Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeDBInstanceHAConfig
<Common request parameters>

{
  "DBInstanceId": "postgres-32d4mmv9"
}
```

## Output Example

```
{
  "Response": {
    "MaxStandbyLag": 10,
    "MaxStandbyLatency": 10737418240,
    "MaxSyncStandbyLag": null,
    "MaxSyncStandbyLatency": null,
    "RequestId": "a5399d5a-c77b-4c57-9a17-790e9c61ab33",
    "SyncMode": "Semi-sync"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact

	customer service.
FailedOperation.DatabaseAffectedError	Data operation failed. Please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
InvalidParameter.ParameterCheckError	Failed to check the parameter.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.InstanceStatusLimitError	This operation cannot be performed on an instance in this status.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.

# SwitchDBInstancePrimary

最近更新时间：2023-10-13 09:42:52

## 1. API Description

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

This API is used to enable the primary-standby switch of an instance.

- By initiating a switch, you can verify whether the primary-standby switch is performed correctly.
- By using forced switch, you can forcibly initiate the primary-standby switch when the delay of replica node failed to meet the switch requirement.
- This operation can only be performed for the primary instance.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: SwitchDBInstancePrimary.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceid	Yes	String	Instance ID
Force	No	Boolean	Whether to perform forced switch. As long as the standby node can be accessed, the switch will be performed regardless of the

			primary-standby sync delay. You can switch immediately only when <code>SwitchTag</code> is <code>0</code> . <li>Default: <code>false</code> .
SwitchTag	No	Integer	Switch time for the specified instance after configuration modification. <ul style="list-style-type: none"> <li><code>0</code> : Switch now.</li> <li><code>1</code> : Switch at the specified time.</li> <li><code>2</code> : Switch in the maintenance time.</li> <li>Default value: <code>0</code> .</li> </ul>
SwitchStartTime	No	String	The earliest time to start a switch in the format of "HH:MM:SS", such as "01:00:00". This parameter is invalid when <code>SwitchTag</code> is <code>0</code> or <code>2</code> .
SwitchEndTime	No	String	The latest time to start a switch in the format of "HH:MM:SS", such as "01:30:00". This parameter is invalid when <code>SwitchTag</code> is <code>0</code> or <code>2</code> . The difference between <code>SwitchStartTime</code> and <code>SwitchEndTime</code> cannot be less than 30 minutes.

### 3. Output Parameters

Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Enabling the primary-standby switch of an instance

This example shows you how to enable primary-standby switch for the instance `postgres-idabksrn` non-forcibly now.

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
```

```
X-TC-Action: SwitchDBInstancePrimary
<Common request parameters>

{
  "DBInstanceId": "postgres-idabksrn"
}
```

### Output Example

```
{
  "Response": {
    "RequestId": "54eeac1a-1d21-43d9-8293-1352d5874860"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
FailedOperation.FlowCreateError	Failed to create a task. Please try again later. If the problem persists, please contact customer service.
FailedOperation.NoAvailableStandby	The instance has no available standby server.
InvalidParameter.ParameterCheckError	Failed to check the parameter.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.InstanceStatusLimitError	This operation cannot be performed on an instance in this status.
OperationDenied.InstanceTypeDenied	Invalid instance type
ResourceNotFound.InstanceNotFoundError	The instance does not exist.



# ModifyDBInstanceChargeType

最近更新时间：2023-10-13 09:42:54

## 1. API Description

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

This API is used to switch the instance billing mode from pay-as-you-go to monthly subscription.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: ModifyDBInstanceChargeType.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceCld	Yes	String	Instance ID in the format of <code>postgres-6fego161</code>
InstanceChargeType	Yes	String	Instance billing mode. Valid values: <ul style="list-style-type: none"><li><code>PREPAID</code> : Monthly subscription.</li><li><code>POSTPAID_BY_HOUR</code> : Pay-as-you-go.</li></ul> Default value: <code>PREPAID</code> .
Period	Yes	Integer	Validity period in months <ul style="list-style-type: none"><li>Monthly subscription: <code>1</code> , <code>2</code> , <code>3</code> , <code>4</code> , <code>5</code> , <code>6</code> , <code>7</code> , <code>8</code> , <code>9</code> , <code>10</code> , <code>11</code> , <code>12</code> , <code>24</code> , <code>36</code> .</li><li>Pay-as-you-go: <code>1</code> .</li></ul>

AutoRenewFlag	No	Integer	Auto-renewal flag. Valid values: <ul style="list-style-type: none"> <li>0 : Manual renewal.</li> <li>1 : Automatic renewal.</li> </ul> Default value: 0 .
AutoVoucher	No	Integer	Whether to use vouchers automatically. Valid values: <ul style="list-style-type: none"> <li>0 : No.</li> <li>1 : Yes.</li> </ul> Default value: 0 .

### 3. Output Parameters

Parameter Name	Type	Description
DealName	String	Order name
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Modifying the billing mode for the instance `postgres-apzvwncr`

This example shows you how to modify the billing mode to monthly subscription for the instance `postgres-apzvwncr` .

#### Input Example

```
POST / HTTP/1.1Host: postgres.tencentcloudapi.comContent-Type: application/jsonX-TC-Action: ModifyDBInstanceChargeType<common request parameters>{ "DBInstanceId": "postgres-apzvwncr", "InstanceChargeType": "PREPAID", "AutoRenewFlag": 0, "AutoVoucher": 0, "Period": 1}
```

#### Output Example

```
{ "Response": { "RequestId": "08fdf411-5d39-44f2-8e1d-a58ee60b237d", "DealName": "201806181256" }}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAffectedError	Data operation failed. Please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
InvalidParameter.ParameterCheckError	Failed to check the parameter.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
InvalidParameterValue.ParameterHandleError	Failed to process the parameter. Please check if the parameter value is valid.
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.InstanceStatusLimitError	This operation cannot be performed on an instance in

---

	this status.
--	--------------

# ModifyDBInstanceHAConfig

最近更新时间：2023-10-13 09:42:54

## 1. API Description

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

This API is used to modify the HA configuration of an instance. u200cwhich includes:

- Allow the standby node to promote to the primary node.
- Allow a semi-sync instance to adopt sync or async replication.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: ModifyDBInstanceHAConfig.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceid	Yes	String	Instance ID
SyncMode	Yes	String	Primary-standby sync mode. Valid values: <ul style="list-style-type: none"><li>• <code>Semi-sync</code></li><li>• <code>Async</code></li></ul>

MaxStandbyLatency	Yes	Integer	<p>u200cMaximum data lag for high-availability standby server. The standby node can be promoted to the primary node when its data lag and the delay time are both less than the value of <code>MaxStandbyLatency</code> and <code>MaxStandbyLag</code> respectively.</p> <ul style="list-style-type: none"> <li>Unit: byte</li> <li>Value range: 1073741824-322122547200</li> </ul>
MaxStandbyLag	Yes	Integer	<p>The maximum delay for high-availability standby server The standby node can be promoted to the primary node when its data lag and the delay time are both less or equals to the value of <code>MaxStandbyLatency</code> and <code>MaxStandbyLag</code> respectively.</p> <ul style="list-style-type: none"> <li>Unit: s</li> <li>Value range: 5-10</li> </ul>
MaxSyncStandbyLatency	No	Integer	<p>Maximum data sync lag for u200dstandby server. If data lag of the standby node and the delay ime are both less than or equals to the values of <code>MaxSyncStandbyLatency</code> and <code>MaxSyncStandbyLag</code> , the standby server adopts semi-sync replication; if not, it adopts async replication. This value is only valid for the instance with <code>SyncMode</code> set to <code>Semi-sync</code> .</p> <p>When the semi-sync replication mode of the instance is not allowed to downgrade to async replication, <code>MaxSyncStandbyLatency</code> and <code>MaxSyncStandbyLag</code> are not required.</p> <p>When the semi-sync instance is allowed to downgrade to async replication, <code>MaxSyncStandbyLatency</code> is required and <code>MaxSyncStandbyLag</code> must be left empty for PostgreSQL 9; <code>MaxSyncStandbyLatency</code> and <code>MaxSyncStandbyLag</code> are required for PostgreSQL 10 and later.</p>
MaxSyncStandbyLag	No	Integer	<p>Maximum delay for u200dsync u200dstandby server. If the delay time for u200dstandby server and the data lag are both less than or equals to the value of <code>MaxSyncStandbyLag</code> and <code>MaxSyncStandbyLatency</code> respectively, the standby server adopts sync replication mode; if not, it adopts async replication.</p> <p>This value is only valid for the instance with <code>SyncMode</code> set to <code>Semi-sync</code> .</p> <p>When the semi-sync replication mode of the instance is</p>

not allowed to downgrade to async replication, `MaxSyncStandbyLatency` and `MaxSyncStandbyLag` are not required.

When the semi-sync instance is allowed to downgrade to async replication, `MaxSyncStandbyLatency` is required and `MaxSyncStandbyLag` must be left empty for PostgreSQL 9; `MaxSyncStandbyLatency` and `MaxSyncStandbyLag`` are required for PostgreSQL 10 and later.

### 3. Output Parameters

Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Modifying the replication mode to be semi-sync (downgradable to async)

This example shows you how to set the primary-standby replication mode to be semi-sync (downgradable to async) and the maximum delay for switch.

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: ModifyDBInstanceHAConfig
<Common request parameters>

{
  "DBInstanceId": "postgres-32d4mmv9",
  "SyncMode": "Semi-sync",
  "MaxStandbyLatency": 10737418240,
  "MaxStandbyLag": 10,
  "MaxSyncStandbyLatency": 1073741824,
```

```
"MaxSyncStandbyLag": 5
}
```

### Output Example

```
{
  "Response": {
    "RequestId": "34c1d54c-ea3e-4594-8a5d-1b739123949d"
  }
}
```

### Example2 u200cModifying the replication mode to be semi-sync (non-downgradable to async)

This example shows you how to set the primary-standby replication mode to be semi-sync (non-downgradable to async) and the maximum delay for switch.

### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: ModifyDBInstanceHAConfig
<Common request parameters>

{
  "DBInstanceId": "postgres-32d4mmv9",
  "SyncMode": "Semi-sync",
  "MaxStandbyLatency": 10737418240,
  "MaxStandbyLag": 10
}
```

### Output Example

```
{
  "Response": {
    "RequestId": "9b923bd9-6a3b-482a-945d-ea2e6f2a9f17"
  }
}
```

### Example3 Modifying the replication mode to be async



This example shows you how to set the primary-standby replication mode to be async and the maximum delay for switch.

### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: ModifyDBInstanceHAConfig
<Common request parameters>

{
  "DBInstanceId": "postgres-32d4mmv9",
  "SyncMode": "Async",
  "MaxStandbyLatency": 10737418240,
  "MaxStandbyLag": 10
}
```

### Output Example

```
{
  "Response": {
    "RequestId": "c4676122-1694-4d0f-8b03-a33b4e1bd850"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
InvalidParameter.ParameterCheckError	Failed to check the parameter.
InvalidParameter.ParametersNotSet	You can't left all parameters empty. You need to set at least one of the parameters.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
InvalidParameterValue.ParameterOutOfRange	Invalid parameter
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.InstanceStatusLimitError	This operation cannot be performed on an instance in this status.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.

# UpgradeDBInstanceKernelVersion

最近更新时间：2023-10-13 09:42:52

## 1. API Description

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

This API is used to upgrade the kernel version of an instance.

A maximum of 100 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: UpgradeDBInstanceKernelVersion.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceid	Yes	String	Instance ID
TargetDBKernelVersion	Yes	String	Target kernel version, which can be obtained in the <code>AvailableUpgradeTarget</code> field in the returned value of the <a href="#">DescribeDBVersions</a> API.
SwitchTag	No	Integer	Switch time after the kernel version upgrade for the specified instance. Valid values: <ul style="list-style-type: none"><li>0 : Switch now.</li><li>1 : Switch at the specified time.</li></ul>

			<ul style="list-style-type: none"> <li><code>2</code> : Switch in the maintenance time.</li> </ul> Default value: <code>0</code> .
SwitchStartTime	No	String	Switch start time in the format of <code>HH:MM:SS</code> , such as <code>01:00:00</code> . When <code>SwitchTag</code> is <code>0</code> or <code>2</code> , this parameter is invalid.
SwitchEndTime	No	String	Switch end time in the format of <code>HH:MM:SS</code> , such as <code>01:30:00</code> . When <code>SwitchTag</code> is <code>0</code> or <code>2</code> , this parameter is invalid. The difference between <code>SwitchStartTime</code> and <code>SwitchEndTime</code> cannot be less than 30 minutes.
DryRun	No	Boolean	Whether to perform a pre-check on the current operation of upgrading the instance kernel version. Valid values: <code>u200c</code> <ul style="list-style-type: none"> <li><code>u200c true</code> : Performs a pre-check without upgrading the kernel version. Check items include request parameters, kernel version compatibility, and instance parameters.</li> </ul> <code>u200cu200c</code> <ul style="list-style-type: none"> <li><code>false</code> : Sends a normal request and upgrades the kernel version directly after the check is passed.</li> </ul> Default value: <code>false</code> .

### 3. Output Parameters

Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Upgrading the version

`u200cu200c`This example shows you how to upgrade the kernel version of an instance.

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: UpgradeDBInstanceKernelVersion
<Common request parameters>

{
  "DBInstanceId": "pgro-g7w4itfg",
  "TargetDBKernelVersion": "v12.7_r1.5",
  "DryRun": "true"
}
```

### Output Example

```
{
  "Response": {
    "RequestId": "2b376d28-d5fd-40b0-9bdc-d992f8fed15d"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAffectedError	Data operation failed. Please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
FailedOperation.PreCheckError	Pre-check failed
InvalidParameter.ParameterCheckError	Failed to check the parameter.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.InstanceStatusLimitOpError	This operation cannot be performed on an instance in this status.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.

# CreateInstances

最近更新时间：2023-10-30 11:41:22

## 1. API Description

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

This API is used to create and initialize one or more TencentDB for PostgreSQL instances.

- After an instance is created successfully, it will start up automatically and enter the "Running" status.
- If you create a monthly subscribed instance, you will be billed for the instance before the creation; if you create a pay-as-you-go instance billed on an hourly basis, the amount equivalent to the hourly rate will be frozen before the creation. Make sure your account balance is sufficient before calling this API.

A maximum of 100 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: CreateInstances
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
Zone	Yes	String	Primary AZ of the instance in the format of <code>ap-guangzhou-3</code> support multiple AZs, add information of the primary and standb the <code>DBNodeSet.N</code> field. The information of AZ can be obtained from the <code>Zone</code> field in value of the <a href="#">DescribeZones</a> API.

Parameter Name	Required	Type	Description
SpecCode	Yes	String	Purchasable code, which can be obtained from the <code>SpecCode</code> the return value of the <a href="#">DescribeClasses</a> API.
Storage	Yes	Integer	Instance storage capacity in GB
InstanceCount	Yes	Integer	The number of instances to be purchased at a time. Value range purchase more than 10 instances each time, you can make mul
Period	Yes	Integer	Validity period in months. <ul style="list-style-type: none"> <li>Monthly subscription: 1, 2, 3, 4, 5, 6, 7, 10, 11, 12, 24, 36.</li> <li>Pay-as-you-go: 1.</li> </ul>
Charset	Yes	String	Instance character set. Valid values: <ul style="list-style-type: none"> <li>UTF8</li> <li>LATIN1</li> </ul>
AdminName	Yes	String	Username of the instance root account, which has the following <ul style="list-style-type: none"> <li>It must contain 1–16 letters, digits, or underscores</li> <li>It can't be <code>postgres</code>.</li> <li>It can't start with a digit or <code>pg_</code>.</li> <li>All rules are case-insensitive.</li> </ul>
AdminPassword	Yes	String	Password of the instance root account, which must contain 8–32 characters (above 12 characters preferably). It cannot begin with and must contain the following 4 types of characters. <ul style="list-style-type: none"> <li>Lowercase letters: [a–z]</li> <li>Uppercase letters: [A–Z]</li> <li>Digits: 0–9</li> <li>Symbols: ()`~!@#%\$^&amp;*~+=_</li> </ul>
DBMajorVersion	No	String	The major PostgreSQL version number, which can be queried by <a href="#">DescribeDBVersions</a> API. Valid values: 10, 11, 12, 15. <p>When only this parameter is specified, an instance running the latest version of the latest minor version will be created based on this version.</p> <p>You must pass in at least one of the following parameters: <code>DBMajorVersion</code>, <code>DBVersion</code>, <code>DBKernelVersion</code>. If you don't need a minor version, just pass in <code>DBMajorVersion`</code>.</p>



Parameter Name	Required	Type	Description
DBVersion	No	String	<p>Number of the major PostgreSQL community version and minor which can be queried by the <a href="#">DescribeDBVersions</a> API.</p> <p>If it is specified, an instance running the latest kernel version will be based on the community minor version.</p> <p>You must pass in at least one of the following parameters: <code>DBMajorVersion</code> , <code>DBVersion</code> , <code>DBKernelVersion</code> .</p>
DBKernelVersion	No	String	<p>PostgreSQL kernel version number, which can be queried by the <a href="#">DescribeDBVersions</a> API.</p> <p>PostgreSQL kernel version number. If it is specified, an instance of the specified kernel version will be created. Passing in this parameter in other scenarios is not supported. This parameter is only used to specify the kernel version, which serves no other purposes.</p>
InstanceChargeType	No	String	<p>Instance billing mode. Valid values:</p> <ul style="list-style-type: none"> <li><code>PREPAID</code> : Monthly subscription</li> <li><code>POSTPAID_BY_HOUR</code> : Pay-as-you-go</li> </ul> <p>Default value: <code>PREPAID</code> .</p>
VpcId	No	String	<p>VPC ID in the format of <code>vpc-xxxxxxx</code> . To obtain valid VPC ID, you can log in to the console or call <code>DescribeVpcEx</code> and look for the <code>unVpcId</code> fields in the response.</p>
SubnetId	No	String	<p>VPC subnet ID in the format of <code>subnet-xxxxxxxx</code> , u200cv can be obtained in the console or from the <code>unSubnetId</code> field in the response value of the <a href="#">DescribeSubnets</a> API.</p>
DBNodeSet.N	No	Array of <a href="#">DBNode</a>	<p>Deployment information of the instance node, which will display information of each AZ when the instance node is deployed across AZs.</p> <p>The information of AZ can be obtained from the <code>zone</code> field in the response value of the <a href="#">DescribeZones</a> API.</p>
AutoRenewFlag	No	Integer	<p>Auto-renewal flag. Valid values:</p> <ul style="list-style-type: none"> <li><code>0</code> : Manual renewal.</li> <li><code>1</code> : Automatic renewal.</li> </ul> <p>Default value: <code>0</code> .</p>
AutoVoucher	No	Integer	<p>Whether to use vouchers automatically. Valid values:</p> <ul style="list-style-type: none"> <li><code>0</code> : No.</li> <li><code>1</code> : Yes.</li> </ul> <p>Default value: <code>0</code> .</p>

Parameter Name	Required	Type	Description
VoucherIds.N	No	Array of String	Voucher ID list. Currently, you can specify only one voucher.
ProjectId	No	Integer	Project ID
ActivityId	No	Integer	Campaign ID
Name	No	String	Instance name, which can contain up to 60 letters, digits, hyphen symbols ( <code>_</code> ). If this parameter is not specified, "Unnamed" will be displayed by default.
TagList.N	No	Array of Tag	The information of tags to be bound with the instance, which is displayed by default. This parameter can be obtained from the <code>Tags</code> field in the return value of the <a href="#">DescribeTags</a> API.
SecurityGroupIds.N	No	Array of String	Security group of the instance, which can be obtained from the <code>SecurityGroups</code> field in the return value of the <a href="#">DescribeSecurityGroups</a> API. If this parameter is not specified, the default security group will be bound to the instance.
NeedSupportTDE	No	Integer	Whether to support TDE. Valid values: <ul style="list-style-type: none"> <li><code>0</code> : No.</li> <li><code>1</code> : Yes.</li> </ul> Default value: <code>0</code> . For more information, see <a href="https://www.tencentcloud.com/document/product/449/2000">[TDE]u200d(https://www.tencentcloud.com/document/product/449/2000)</a> .
KMSKeyId	No	String	KeyId of custom key, which is required if you select custom key. It is also the unique CMK identifier. For more information on creating <code>KeyId</code> , see <a href="#">Enabling TDE</a> .
KMSRegion	No	String	The region where the KMS service is enabled. When <code>KMSRegion</code> is empty, the current region will be selected by default. If the current region does not support KMS, you must select another region that does support KMS. For more information on <code>KMSRegion</code> , see <a href="#">Enabling TDE</a> .
DBEngine	No	String	Database engines. Valid values: <ul style="list-style-type: none"> <li><code>postgresql</code> : TencentDB for PostgreSQL</li> <li><code>mssql_compatible</code> : MSSQL compatible-TencentDB for PostgreSQL</li> </ul> Default value: <code>postgresql</code> .
DBEngineConfig	No	String	Configuration information of database engine in the following format: <code>{"\$key1": "\$value1", "\$key2": "\$value2"}</code>



Parameter Name	Required	Type	Description
SyncMode	No	String	Primary-standby sync mode. Valid values: <ul style="list-style-type: none"> <li><code>Semi-sync</code></li> <li><code>Async</code></li> </ul> Default value for the primary instance: <code>Semi-sync</code> . Default value for the standby instance: <code>Async</code> .
NeedSupportIpv6	No	Integer	Whether IPv6 is supported. <ul style="list-style-type: none"> <li><code>0</code> : No.</li> <li><code>1</code> : Yes.</li> </ul> Default value: <code>0</code> .

### 3. Output Parameters

Parameter Name	Type	Description
DealNames	Array of String	Order number list. Each instance corresponds to an order number.
BillId	String	Bill ID of frozen fees
DBInstanceSet	Array of String	ID set of instances which have been created successfully. The parameter value will be returned only when the pay-as-you-go billing mode is used.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Creating a PostgreSQL 12.4 instance

This example shows you how to create an instance running the latest kernel of PostgreSQL 12.4.

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
```

**Content-Type: application/json**

**X-TC-Action: CreateInstances**

<Common request parameters>

```
{
  "InstanceCount": "1",
  "AutoRenewFlag": "1",
  "AdminName": "test2313",
  "Zone": "ap-guangzhou-2",
  "AdminPassword": "xxxxxxx",
  "DBVersion": "12.4",
  "DBEngine": "postgresql",
  "Storage": "10",
  "Period": "1",
  "SpecCode": "cdb.pg.z1.2g",
  "InstanceChargeType": "prepaid",
  "AutoVoucher": "0",
  "Charset": "UTF8"
}
```

## Output Example

```
{
  "Response": {
    "RequestId": "6ace8140-6b9e-4e81-a8ad-ef3f92b2aa90",
    "DealNames": [
      "20180119110001"
    ],
    "DBInstanceIdSet": [
      "postgres-xxxxx"
    ],
    "BillId": "123"
  }
}
```

## Example2 Creating an instance running the latest kernel of PostgreSQL 12

This example shows you how to create a multi-AZ deployed instance running the latest kernel of PostgreSQL 12.

## Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: CreateInstances
```

```
<Common request parameters>

{
  "InstanceCount": "1",
  "AutoRenewFlag": "1",
  "DBMajorVersion": "12",
  "Zone": "ap-guangzhou-2",
  "AdminPassword": "xxxxxxx",
  "Charset": "UTF8",
  "Storage": "10",
  "Period": "1",
  "SpecCode": "cdb.pg.z1.2g",
  "InstanceChargeType": "prepaid",
  "AutoVoucher": "0",
  "DBNodeSet": [
    {
      "Role": "Standby",
      "Zone": "ap-guangzhou-3"
    },
    {
      "Role": "Primary",
      "Zone": "ap-guangzhou-2"
    }
  ],
  "AdminName": "test2313"
}
```

## Output Example

```
{
  "Response": {
    "RequestId": "6ace8140-6b9e-4e81-a8ad-ef3f92b2aa90",
    "DealNames": [
      "20180119110001"
    ],
    "DBInstanceIdSet": [
      "postgres-xxxxx"
    ],
    "BillId": "123"
  }
}
```

## Example3 Creating a PostgreSQL instance running a specific kernel version

This example shows you how to create a PostgreSQL instance running kernel v12.4\_r1.0.

## Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: CreateInstances
<Common request parameters>

{
  "InstanceCount": "1",
  "AutoRenewFlag": "1",
  "AdminName": "test2313",
  "Zone": "ap-guangzhou-2",
  "AdminPassword": "xxxxxxx",
  "Charset": "UTF8",
  "Storage": "10",
  "Period": "1",
  "SpecCode": "cdb.pg.z1.2g",
  "DBKernelVersion": "v12.4_r1.0",
  "DBEngine": "postgresql",
  "InstanceChargeType": "prepaid",
  "AutoVoucher": "0"
}
```

## Output Example

```
{
  "Response": {
    "RequestId": "6ace8140-6b9e-4e81-a8ad-ef3f92b2aa90",
    "DealNames": [
      "20180119110001"
    ],
    "DBInstanceIdSet": [
      "postgres-xxxxx"
    ],
    "BillId": "123"
  }
}
```

# 5. Developer Resources

## SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
AuthFailure.UnauthorizedOperation	Authentication failed.
FailedOperation.AllocateQuotasError	Failed to request a quota for resource tags.
FailedOperation.CamAuthFailed	CAM authentication failed.
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.CdbCgwConnectError	Failed to get project information. Please try again later. If the problem persists, please contact customer service.
FailedOperation.CreateBasicNetworkDeniedError	Classic network creation is unsupported.
FailedOperation.CreateOrderFailed	Failed to create the renewal order.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.



Error Code	Description
FailedOperation.DatabaseAffectedError	Data operation failed. Please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
FailedOperation.FlowCreateError	Failed to create a task. Please try again later. If the problem persists, please contact customer service.
FailedOperation.GetSubnetError	Failed to query VPC subnets.
FailedOperation.GetVpcInfoError	Failed to query VPC information. Please try again later. If the problem persists, please contact customer service.
FailedOperation.InvalidTradeOperate	Billing error. Corresponding purchase/renewal/configuration change operations are not allowed for the current instance.
FailedOperation.PayOrderFailed	Failed to make order payment.
FailedOperation.QueryPriceFailed	Failed to query the price.
FailedOperation.QuerySpecError	Failed to query specifications. Please try again later. If the problem persists, please contact customer service.
FailedOperation.QueryVpcFailed	Failed to query VPC.
FailedOperation.QueryVpcFalied	Failed to get VPC details.
FailedOperation.ServiceAccessError	Failed to access internal service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.StorageMemoryCheckError	The memory and storage capacity to which an instance is upgraded should be higher than its original memory and storage capacity.
FailedOperation.TradeCreateError	Failed to request the billing platform to create an order.
FailedOperation.TradePayOrdersError	Failed to request to pay for the order.
InternalError.CgwError	CGW error.

Error Code	Description
InternalServerError.CnsError	Basic network error.
InternalServerError.DBError	Backend database execution error.
InternalServerError.DfwError	DFW error.
InternalServerError.FlowError	Failed to create the flow.
InternalServerError.InternalHttpServerError	An exception occurred while executing the request.
InternalServerError.SystemError	System error. When this error occurs, please contact customer service for assistance.
InternalServerError.UnknownError	Unknown error. When this error occurs, please contact customer service for assistance.
InternalServerError.VpcError	VPC error.
InvalidParameter	Parameter error.
InvalidParameter.ParameterCheckError	Failed to check the parameter.
InvalidParameter.TradeAccessDeniedError	Incorrect PID
InvalidParameter.VpcNotFoundError	Failed to query VPC information.
InvalidParameterValue.AccountExist	The current account already exists.
InvalidParameterValue.BadSpec	The instance specification to upgrade to is not purchasable.
InvalidParameterValue.CharsetNotFoundError	Incorrect database character set
InvalidParameterValue.DataConvertError	Failed to convert data format. Please contact customer service.
InvalidParameterValue.IllegalInstanceChargeType	Incorrect billing mode.
InvalidParameterValue.IllegalProjectId	Invalid <code>ProjectId</code> .
InvalidParameterValue.IllegalRegion	Invalid <code>Region</code> parameter.
InvalidParameterValue.IllegalZone	Invalid <code>Zone</code> parameter.
InvalidParameterValue.InterfaceNameNotFound	Incorrect <code>ACTION</code> .

Error Code	Description
InvalidParameterValue.InvalidAccountError	Invalid account. The account name is case-insensitive, must contain 1-16 characters comprised of letters, digits, underscores, and should neither be "postgres" nor start with a digit or "pg_".
InvalidParameterValue.InvalidAccountFormat	Incorrect account format.
InvalidParameterValue.InvalidAccountName	The current account name cannot be a reserved character.
InvalidParameterValue.InvalidCharset	Incorrect database character set. Currently, only <code>UTF8</code> and <code>LATIN1</code> are supported.
InvalidParameterValue.InvalidInstanceNum	The number of purchased instances exceeds the limit.
InvalidParameterValue.InvalidOrderNum	Billing error. Invalid order type ID.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
InvalidParameterValue.InvalidPasswordFormat	Incorrect password format.
InvalidParameterValue.InvalidPasswordLengthError	Invalid password. The password length does not meet the requirements.
InvalidParameterValue.InvalidPasswordValueError	Invalid password. The password must contain uppercase letters, lowercase letters, digits, and symbols ( <code>()`~!@#\$\$%^&amp;*~+=_</code>
InvalidParameterValue.InvalidPid	Incorrect <code>PID</code> parameter.
InvalidParameterValue.InvalidZoneldError	Invalid availability zone.
InvalidParameterValue.ParameterCharacterError	Invalid parameter. The parameter can contain only letters, digits, underscores, and hyphens.
InvalidParameterValue.ParameterHandleError	Failed to process the parameter. Please check if the parameter value is valid.
InvalidParameterValue.ParameterLengthLimitError	The length of parameter exceeds the limit.
InvalidParameterValue.ParameterOutOfRangeError	Invalid parameter values.
InvalidParameterValue.RegionNotSupported	The current region is not supported.

Error Code	Description
InvalidParameterValue.SpecNotRecognizedError	Failed to identify the specification ({{1}}).
InvalidParameterValue.StructParseFailed	An error occurred while parsing parameters.
InvalidPid	Incorrect <code>PID</code> parameter.
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.InstanceStatusLimitOpError	This operation cannot be performed on an instance in this status.
OperationDenied.UserNotAuthenticatedError	You need to verify your identity to make a purchase.
OperationDenied.VpcDeniedError	You do not have the permission to operate the VPC.
ResourceInsufficient.ResourceNotEnough	There are not enough resources to purchase instances of this specification in the current region.
ResourceUnavailable.InvalidInstanceStatus	Incorrect instance status.
ResourceUnavailable.ResourceNoPermission	No permission for the VPC.
ResourceUnavailable.VpcResourceNotFound	Failed to get the information of the VPC where the instance resides.
UnauthorizedOperation.UserHasNoRealnameAuthentication	Unverified user.
UnknownError	Unknown error. When this error occurs, please contact customer service for assistance.

# DescribeDBInstanceAttribute

最近更新时间：2023-10-13 09:42:56

## 1. API Description

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

This API is used to query the details of one instance.

A maximum of 1000 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeDBInstanceAttribute.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceId	Yes	String	Instance ID

## 3. Output Parameters

Parameter Name	Type	Description
DBInstance	<a href="#">DBInstance</a>	Instance details.

RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.
-----------	--------	--

## 4. Example

### Example1 Querying instance details

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeDBInstanceAttribute
<Common request parameters>

{
  "DBInstanceId": "postgres-xxxxxxx"
}
```

#### Output Example

```
{
  "Response": {
    "RequestId": "08fdf411-5d39-44f2-8e1d-a58ee60b237d",
    "DBInstance": {
      "Region": "ap-guangzhou",
      "Zone": "ap-guangzhou-2",
      "AppId": 100000000,
      "UId": 1000001,
      "ProjectId": 0,
      "VpcId": "vpc-xxxxxxx",
      "SubnetId": "subnet-xxxxxxx",
      "DBInstanceId": "postgres-xxxxxxx",
      "MasterDBInstanceId": "postgres-xxxxxxx",
      "Type": 1,
      "DBInstanceName": "Unnamed",
      "DBInstanceStatus": "running",
      "DBInstanceMemory": 4,
      "DBInstanceStorage": 20,
      "DBInstanceCpu": 2,
      "DBInstanceClass": "cdb.pg.z1.4g",
      "DBInstanceType": "primary",
      "DBInstanceVersion": "standard",
      "DBInstanceNetInfo": [
```

```

{
  "Address": "",
  "Ip": "10.10.10.220",
  "Port": 5432,
  "Status": "opened",
  "NetType": "private",
  "VpcId": "vpc-xxxxxxx",
  "SubnetId": "subnet-xxxxxxx"
},
{
  "Address": "",
  "Ip": "",
  "Port": 0,
  "Status": "initing",
  "NetType": "public",
  "VpcId": "",
  "SubnetId": ""
}
],
"DBCharset": "UTF8",
"IsSupportTDE": 0,
"DBVersion": "10.4",
"DBMajorVersion": "10",
"DBKernelVersion": "v10.4_r1.0",
"CreateTime": "2017-12-28 19:23:19",
"UpdateTime": "2018-01-18 15:54:32",
"ExpireTime": "2018-01-28 19:23:23",
"IsolatedTime": "0000-00-00 00:00:00",
"OfflineTime": "2019-12-28 19:23:19",
"PayType": "prepaid",
"AutoRenew": 1,
"ReadOnlyInstanceNum": 1,
"StatusInReadOnlyGroup": "running",
"SupportIpv6": 0,
"TagList": [
  {
    "TagKey": "tag1",
    "TagValue": "v1"
  }
],
"NetworkAccessList": [],
"DBNodeSet": [
  {
    "Role": "Primary",
    "Zone": "ap-guangzhou-2"
  },
  {

```

```

"Role": "Standby",
"Zone": "ap-guangzhou-3"
}
]
}
}
}
}

```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
AuthFailure.UnauthorizedOperation	Authentication failed.
FailedOperation.CamCheckResourceError	Failed to get permissions. Please try again later. If the problem persists, please contact customer service.
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.



FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAffectedError	Data operation failed. Please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
FailedOperation.QueryInstanceBatchError	Failed to query instance information in batches. Please try again later. If the problem persists, please contact customer service.
FailedOperation.QuerySpecBySpecCodeError	Failed to query specifications.
InternalError.DBError	Backend database execution error.
InternalError.InternalHttpServerError	An exception occurred while executing the request.
InternalError.SystemError	System error. When this error occurs, please contact customer service for assistance.
InternalError.TransactionBeginError	Failed to enable transactions
InternalError.UnknownError	Unknown error. When this error occurs, please contact customer service for assistance.
InvalidParameter	Parameter error.
InvalidParameterValue.IllegalRegion	Invalid <code>Region</code> parameter.
InvalidParameterValue.IllegalZone	Invalid <code>Zone</code> parameter.
InvalidParameterValue.InstanceNotExist	The current instance does not exist.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
InvalidParameterValue.ParameterHandleError	Failed to process the parameter. Please check if the parameter value is valid.
OperationDenied.CamDeniedError	This operation cannot be performed.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.

# DescribeDBInstances

最近更新时间：2023-10-13 09:42:55

## 1. API Description

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

This API is used to query the details of one or more instances.

A maximum of 1000 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeDBInstances.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
Filters.N	No	Array of <a href="#">Filter</a>	Filter instances using one or more criteria. Valid filter names: db-instance-id: filter by instance ID (in string format) db-instance-name: filter by instance name (in string format) db-project-id: filter by project ID (in integer format) db-pay-mode: filter by billing mode (in string format) db-tag-key: filter by tag key (in string format)
Limit	No	Integer	The maximum number of results returned per page. Value range: 1-100. Default: <code>10</code>
Offset	No	Integer	Data offset, which starts from 0.

OrderBy	No	String	Sorting metric, such as instance name or creation time. Valid values: DBInstanceId, CreateTime, Name, EndTime
OrderByType	No	String	Sorting order. Valid values: <code>asc</code> (ascending), <code>desc</code> (descending)

### 3. Output Parameters

Parameter Name	Type	Description
TotalCount	Integer	Number of instances found.
DBInstanceSet	Array of <a href="#">DBInstance</a>	Instance details set.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Querying the list of instances

##### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeDBInstances
<Common request parameters>

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

##### Output Example

```
{
  "Response": {
    "TotalCount": 1,
```

```

"DBInstanceSet": [
{
"Zone": "ap-guangzhou-2",
"DBInstanceName": "xxx",
"DBNodeSet": [
{
"Role": "Primary",
"Zone": "ap-guangzhou-2"
}
],
"Type": 1,
"IsSupportTDE": 0,
"DBMajorVersion": "10",
"ReadOnlyInstanceNum": 1,
"MasterDBInstanceId": "",
"UpdateTime": "2020-09-22 00:00:00",
"VpcId": "vpc-xxxxxxxx",
"IsolatedTime": "2020-09-22 00:00:00",
"DBVersion": "10",
"DBKernelVersion": "v10.4_r1.0",
"DBInstanceVersion": "standard",
"AutoRenew": 1,
"StatusInReadOnlyGroup": "running",
"SubnetId": "subnet-xxxxxxxx",
"DBInstanceMemory": 1,
"DBInstanceType": "primary",
"DBInstanceStatus": "running",
"OfflineTime": "2019-12-28 19:23:19",
"Region": "ap-guangzhou",
"ProjectId": 1,
"DBInstanceNetInfo": [
{
"Address": "",
"Ip": "10.10.10.220",
"Port": 5432,
"Status": "opened",
"NetType": "private",
"VpcId": "vpc-xxxxxxxx",
"SubnetId": "subnet-xxxxxxxx"
},
{
"Address": "",
"Ip": "",
"Port": 0,
"Status": "",
"NetType": "public",
"VpcId": "",

```

```
"SubnetId": ""
}
],
"DBInstanceStorage": 1,
"Uid": 1,
"DBCharset": "UTF8",
"DBInstanceId": "postgres-xxxxxxx",
"PayType": "prepaid",
"ExpireTime": "2020-09-22 00:00:00",
"SupportIpv6": 1,
"AppId": 1,
"DBInstanceClass": "cdb.pg.z1.4g",
"CreateTime": "2020-09-22 00:00:00",
"DBInstanceCpu": 1,
"TagList": [
{
"TagKey": "tag1",
"TagValue": "v1"
}
],
"NetworkAccessList": []
}
],
"RequestId": "d849664a-191c-48bf-b42f-444caa189557"
}
}
```

## Example2 Querying instance information by ID

This example shows you how to query the details of the instance with the ID "postgres-xxxxxxx".

### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeDBInstances
<Common request parameters>

{
"Limit": "10",
"Filters": [
{
"Values": [
"postgres-xxxxxxx"
],
}
```

```

    "Name": "db-instance-id"
  }
],
"Offset": "0"
}

```

## Output Example

```

{
  "Response": {
    "RequestId": "d849664a-191c-48bf-b42f-444caa189557",
    "TotalCount": 1,
    "DBInstanceSet": [
      {
        "Region": "ap-guangzhou",
        "Zone": "ap-guangzhou-2",
        "AppId": 100000000,
        "Uid": 1000001,
        "ProjectId": 0,
        "VpcId": "vpc-xxxxxxx",
        "SubnetId": "subnet-xxxxxxx",
        "Type": 1,
        "DBNodeSet": [
          {
            "Role": "Primary",
            "Zone": "ap-guangzhou-2"
          }
        ],
        "DBInstanceId": "postgres-xxxxxxx",
        "MasterDBInstanceId": "",
        "DBInstanceName": "test",
        "DBInstanceStatus": "running",
        "DBInstanceMemory": 4,
        "DBInstanceStorage": 20,
        "DBInstanceCpu": 2,
        "DBInstanceClass": "cdb.pg.z1.4g",
        "DBInstanceType": "primary",
        "DBInstanceVersion": "standard",
        "DBInstanceNetInfo": [
          {
            "Address": "",
            "Ip": "10.10.10.220",
            "Port": 5432,
            "Status": "opened",
            "NetType": "private",
            "VpcId": "vpc-xxxxxxx",

```

```
"SubnetId": "subnet-xxxxxxx",
},
{
  "Address": "",
  "Ip": "",
  "Port": 0,
  "Status": "",
  "NetType": "public",
  "VpcId": "",
  "SubnetId": ""
}
],
"DBCharset": "UTF8",
"DBVersion": "10",
"IsSupportTDE": 0,
"DBMajorVersion": "10",
"DBKernelVersion": "v10.4_r1.0",
"CreateTime": "2017-12-28 19:23:19",
"UpdateTime": "2018-01-18 15:54:32",
"ExpireTime": "2018-01-28 19:23:23",
"IsolatedTime": "0000-00-00 00:00:00",
"OfflineTime": "2019-12-28 19:23:19",
"StatusInReadOnlyGroup": "running",
"ReadOnlyInstanceNum": 1,
"PayType": "prepaid",
"AutoRenew": 1,
"SupportIpv6": 0,
"TagList": [
  {
    "TagKey": "tag1",
    "TagValue": "v1"
  }
],
"NetworkAccessList": []
}
]
}
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

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- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
AuthFailure.UnauthorizedOperation	Authentication failed.
FailedOperation.CamCheckResourceError	Failed to get permissions. Please try again later. If the problem persists, please contact customer service.
FailedOperation.CamCheckResourceFailed	Failed to check resource permissions through CAM.
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAffectedError	Data operation failed. Please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
FailedOperation.LimitOperation	Operations are not allowed on the instance.
FailedOperation.OssAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact



	customer service.
InternalError.DBError	Backend database execution error.
InternalError.InternalHttpServerError	An exception occurred while executing the request.
InternalError.SystemError	System error. When this error occurs, please contact customer service for assistance.
InternalError.TransactionBeginError	Failed to enable transactions
InternalError.UnknownError	Unknown error. When this error occurs, please contact customer service for assistance.
InvalidParameter	Parameter error.
InvalidParameterValue.DataConvertError	Failed to convert data format. Please contact customer service.
InvalidParameterValue.IllegalRegion	Invalid <code>Region</code> parameter.
InvalidParameterValue.InstanceNotExist	The current instance does not exist.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
InvalidParameterValue.InvalidRegionIdError	Invalid region
InvalidParameterValue.ParameterHandleError	Failed to process the parameter. Please check if the parameter value is valid.
InvalidParameterValue.RegionNotSupported	The current region is not supported.
InvalidParameterValue.StructParseFailed	An error occurred while parsing parameters.
OperationDenied.CamDeniedError	This operation cannot be performed.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.
ResourceUnavailable.InvalidInstanceStatus	Incorrect instance status.
UnsupportedOperation	The operation is not supported.

# InitDBInstances

最近更新时间：2023-10-13 09:42:55

## 1. API Description

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

This API is used to initialize a TencentDB for PostgreSQL instance. This API is disused and replaced by the [CreateInstances](#) API.

A maximum of 100 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: InitDBInstances.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceIds.N	Yes	Array of String	Instance ID set.
AdminName	Yes	String	Instance admin account username.
AdminPassword	Yes	String	Password corresponding to instance root account username.
Charset	Yes	String	Instance character set. Valid values: UTF8, LATIN1.

### 3. Output Parameters

Parameter Name	Type	Description
DBInstanceIdSet	Array of String	Instance ID set.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Initializing one instance

This example shows you how to initialize the instance with the ID "postgres-6fego161".

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: InitDBInstances
<Common request parameters>

{
  "AdminPassword": "testuser%40123",
  "Charset": "UTF8",
  "AdminName": "testuser",
  "DBInstanceIdSet": [
    "postgres-6fego161"
  ]
}
```

#### Output Example

```
{
  "Response": {
    "RequestId": "98fe67de-f7a7-4285-b1f2-40c2a2a3495e",
    "DBInstanceIdSet": [
      "postgres-6fego161"
    ]
  }
}
```

```
]
}
}
```

## Example2 Initializing multiple instances

This example shows you how to simultaneously initialize two instances with IDs "postgres-6fego161" and "postgres-lnp6j617" respectively.

### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: InitDBInstances
<Common request parameters>

{
  "AdminPassword": "testuser%40123",
  "Charset": "UTF8",
  "AdminName": "testuser",
  "DBInstanceIdSet": [
    "postgres-lnp6j617",
    "postgres-6fego161"
  ]
}
```

### Output Example

```
{
  "Response": {
    "RequestId": "5b895b34-5448-4c55-9ad1-a61427c15837",
    "DBInstanceIdSet": [
      "postgres-6fego161",
      "postgres-lnp6j617"
    ]
  }
}
```

## 5. Developer Resources

### SDK

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- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
AuthFailure.UnauthorizedOperation	Authentication failed.
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
FailedOperation.FlowCreateError	Failed to create a task. Please try again later. If the problem persists, please contact customer service.
InternalServerError.DBError	Backend database execution error.
InternalServerError.InternalHttpServerError	An exception occurred while executing the request.
InternalServerError.SystemError	System error. When this error occurs, please contact customer service for assistance.
InvalidParameter	Parameter error.

InvalidParameter.ParameterCheckError	Failed to check the parameter.
InvalidParameterValue.CharsetNotFoundError	Incorrect database character set
InvalidParameterValue.InstanceNotExist	The current instance does not exist.
InvalidParameterValue.InvalidAccountError	Invalid account. The account name is case-insensitive, must contain 1-16 characters comprised of letters, digits, underscores, and should neither be "postgres" nor start with a digit or "pg_".
InvalidParameterValue.InvalidAccountFormat	Incorrect account format.
InvalidParameterValue.InvalidCharset	Incorrect database character set. Currently, only <code>UTF8</code> and <code>LATIN1</code> are supported.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
InvalidParameterValue.InvalidPasswordFormat	Incorrect password format.
InvalidParameterValue.InvalidPasswordLengthError	Invalid password. The password length does not meet the requirements.
InvalidParameterValue.InvalidPasswordValueError	Invalid password. The password must contain uppercase letters, lowercase letters, digits, and symbols ( <code>()`~!@#\$%^&amp;*~+=_{}[]:;&lt;&gt;.,?/</code> ), and cannot start with a slash ( <code>/</code> ).
InvalidParameterValue.ParameterCharacterLimitError	The parameter is invalid. Please modify it and try again.
InvalidParameterValue.ParameterCharacterPreLimitError	The parameter prefix is invalid. Please modify it and try again.
InvalidParameterValue.ParameterHandleError	Failed to process the parameter. Please check if the parameter value is valid.
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.InstanceAccessDeniedError	You do not have the permission to operate this resource.
OperationDenied.InstanceStatusLimitOpError	This operation cannot be performed on an instance in this status.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.

ResourceUnavailable.InvalidInstanceStatus

Incorrect instance status.

# UpgradeDBInstance

最近更新时间：2023-10-13 09:42:52

## 1. API Description

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

This API is used to upgrade instance configurations. [u200cThis API is disused and replaced by the ModifyDBInstanceSpec API.](#)

A maximum of 100 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: UpgradeDBInstance.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
Memory	Yes	Integer	Instance memory size in GB after upgrade
Storage	Yes	Integer	Instance disk size in GB after upgrade
DBInstanceCld	Yes	String	Instance ID in the format of postgres-1np6j617
AutoVoucher	No	Integer	Whether to automatically use vouchers. 1: yes, 0: no. Default value: no
VoucherIds.N	No	Array	Voucher ID list (only one voucher can be specified currently)



		of String	
ActivityId	No	Integer	Activity ID
SwitchTag	No	Integer	Switch time after instance configurations are modified. Valid values: <code>0</code> (switch immediately), <code>1</code> (switch at specified time). Default value: <code>0</code>
SwitchStartTime	No	String	The earliest time to start a switch
SwitchEndTime	No	String	The latest time to start a switch

### 3. Output Parameters

Parameter Name	Type	Description
DealName	String	Transaction name.
BillId	String	Bill ID of frozen fees
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Upgrading an instance

u200cThis example shows you how to modify the configuration of the instance "postgres-6bwgamo3" to 2 GB MEM and 100 GB storage.

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: UpgradeDBInstance
<Common request parameters>

{
  "Storage": "200",
  "DBInstanceId": "postgres-6bwgamo3",
```

```
"Memory": "2"
}
```

### Output Example

```
{
  "Response": {
    "RequestId": "08fdf411-5d39-44f2-8e1d-a58ee60b237d",
    "DealName": "201806127634",
    "BillId": "123"
  }
}
```

## 5. Developer Resources

### SDK

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- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
AuthFailure.UnauthorizedOperation	Authentication failed.

FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.CreateOrderFailed	Failed to create the renewal order.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
FailedOperation.GetPurchaseRecordFailed	Failed to get the purchase record.
FailedOperation.PayOrderFailed	Failed to make order payment.
FailedOperation.QueryPriceFailed	Failed to query the price.
FailedOperation.QuerySpecError	Failed to query specifications. Please try again later. If the problem persists, please contact customer service.
FailedOperation.StorageMemoryCheckError	The memory and storage capacity to which an instance is upgraded should be higher than its original memory and storage capacity.
FailedOperation.TradeAccessError	Failed to access the billing platform. Please try again later. If the problem persists, please contact customer service.
InternalError.DBError	Backend database execution error.
InternalError.InternalHttpServerError	An exception occurred while executing the request.
InternalError.SystemError	System error. When this error occurs, please contact customer service for assistance.
InvalidParameter	Parameter error.
InvalidParameterValue.BadSpec	The instance specification to upgrade to is not purchasable.
InvalidParameterValue.IllegalRegion	Invalid <code>Region</code> parameter.
InvalidParameterValue.IllegalZone	Invalid <code>Zone</code> parameter.
InvalidParameterValue.InstanceNotExist	The current instance does not exist.
InvalidParameterValue.InvalidInstanceVolume	The instance specification to upgrade to cannot be lower than the current instance specification.

InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
InvalidParameterValue.ParameterHandleError	Failed to process the parameter. Please check if the parameter value is valid.
InvalidPid	Incorrect <code>PID</code> parameter.
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.InstanceAccessDeniedError	You do not have the permission to operate this resource.
OperationDenied.InstanceStatusLimitOpError	This operation cannot be performed on an instance in this status.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.
ResourceUnavailable.InvalidInstanceStatus	Incorrect instance status.

# SetAutoRenewFlag

最近更新时间：2023-10-13 09:42:53

## 1. API Description

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

This API is used to set auto-renewal.

A maximum of 100 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: SetAutoRenewFlag.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceIdsSet.N	Yes	Array of String	List of instance IDs. Note that currently you cannot manipulate multiple instances at the same time. Only one instance ID can be passed in here.
AutoRenewFlag	Yes	Integer	Renewal flag. 0: normal renewal, 1: auto-renewal, 2: no renewal upon expiration

## 3. Output Parameters

--	--	--

Parameter Name	Type	Description
Count	Integer	Number of successfully set instances
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Setting auto-renewal

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: SetAutoRenewFlag
<Common request parameters>

{
  "AutoRenewFlag": "1",
  "DBInstanceIdSet": [
    "postgres-6fego161"
  ]
}
```

#### Output Example

```
{
  "Response": {
    "RequestId": "08fdf411-5d39-44f2-8e1d-a58ee60b237d",
    "Count": 1
  }
}
```

## 5. Developer Resources

### SDK

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- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
AuthFailure.UnauthorizedOperation	Authentication failed.
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
FailedOperation.SetAutoRenewFlagError	Failed to set the auto-renewal flag.
InternalServerError.InternalHttpServerError	An exception occurred while executing the request.
InternalServerError.SystemError	System error. When this error occurs, please contact customer service for assistance.
InvalidParameter	Parameter error.
InvalidParameterValue.IllegalInstanceChargeType	Incorrect billing mode.

InvalidParameterValue.InstanceNotExist	The current instance does not exist.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
InvalidParameterValue.ParameterHandleError	Failed to process the parameter. Please check if the parameter value is valid.
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.InstanceAccessDeniedError	You do not have the permission to operate this resource.
OperationDenied.InstanceStatusLimitOpError	This operation cannot be performed on an instance in this status.
OperationDenied.PostPaidPayModeError	Pay-as-you-go instances cannot be renewed.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.
ResourceUnavailable.InvalidInstanceStatus	Incorrect instance status.



# RestartDBInstance

最近更新时间：2023-10-13 09:42:53

## 1. API Description

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

This API is used to restart an instance.

A maximum of 50 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: RestartDBInstance.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceid	Yes	String	Instance ID in the format of postgres-6r233v55

## 3. Output Parameters

Parameter Name	Type	Description
FlowId	Integer	Async flow ID
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for

locating a problem.

## 4. Example

### Example1 Restarting instance

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: RestartDBInstance
<Common request parameters>

{
  "DBInstanceId": "postgres-apzvwncr"
}
```

#### Output Example

```
{
  "Response": {
    "FlowId": 1234,
    "RequestId": "08fdf411-5d39-44f2-8e1d-a58ee60b237d"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)

- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
AuthFailure.UnauthorizedOperation	Authentication failed.
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
FailedOperation.FlowCreateError	Failed to create a task. Please try again later. If the problem persists, please contact customer service.
InternalError.DBError	Backend database execution error.
InternalError.FlowError	Failed to create the flow.
InternalError.InternalHttpServerError	An exception occurred while executing the request.
InternalError.SystemError	System error. When this error occurs, please contact customer service for assistance.
InvalidParameter	Parameter error.
InvalidParameterValue.InstanceNotExist	The current instance does not exist.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
InvalidParameterValue.ParameterHandleError	Failed to process the parameter. Please check if the parameter value is valid.
OperationDenied.CamDeniedError	This operation cannot be performed.

OperationDenied.InstanceAccessDeniedError	You do not have the permission to operate this resource.
OperationDenied.InstanceStatusLimitOpError	This operation cannot be performed on an instance in this status.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.
ResourceUnavailable.InvalidInstanceStatus	Incorrect instance status.

# RenewInstance

最近更新时间：2023-10-13 09:42:53

## 1. API Description

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

This API is used to renew an instance.

A maximum of 100 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: RenewInstance.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceid	Yes	String	Instance ID in the format of <code>postgres-6fego161</code>
Period	Yes	Integer	Renewal duration in months
AutoVoucher	No	Integer	Whether to automatically use vouchers. 1: yes, 0: no. Default value: 0
VoucherIds.N	No	Array of String	Voucher ID list (only one voucher can be specified currently)

### 3. Output Parameters

Parameter Name	Type	Description
DealName	String	Order name
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Renewing instance "postgres-apzvwncr"

##### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: RenewInstance
<Common request parameters>

{
  "DBInstanceId": "postgres-apzvwncr",
  "Period": "1"
}
```

##### Output Example

```
{
  "Response": {
    "RequestId": "08fdf411-5d39-44f2-8e1d-a58ee60b237d",
    "DealName": "201806181256"
  }
}
```

### 5. Developer Resources

#### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
AuthFailure.UnauthorizedOperation	Authentication failed.
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.CreateOrderFailed	Failed to create the renewal order.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
FailedOperation.GetVpcInfoError	Failed to query VPC information. Please try again later. If the problem persists, please contact customer service.
FailedOperation.QueryVpcFailed	Failed to query VPC.
FailedOperation.QueryVpcFalied	Failed to get VPC details.
FailedOperation.TradeCreateError	Failed to request the billing platform to create an order.

FailedOperation.TradePayOrdersError	Failed to request to pay for the order.
InternalError.DBError	Backend database execution error.
InternalError.InternalHttpServerError	An exception occurred while executing the request.
InternalError.SystemError	System error. When this error occurs, please contact customer service for assistance.
InvalidParameter	Parameter error.
InvalidParameter.VpcNotFoundError	Failed to query VPC information.
InvalidParameterValue.BadSpec	The instance specification to upgrade to is not purchasable.
InvalidParameterValue.IllegalInstanceChargeType	Incorrect billing mode.
InvalidParameterValue.IllegalRegion	Invalid <code>Region</code> parameter.
InvalidParameterValue.IllegalZone	Invalid <code>Zone</code> parameter.
InvalidParameterValue.InstanceNotExist	The current instance does not exist.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
InvalidParameterValue.ParameterHandleError	Failed to process the parameter. Please check if the parameter value is valid.
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.InstanceAccessDeniedError	You do not have the permission to operate this resource.
OperationDenied.InstanceStatusLimitError	This operation cannot be performed on an instance in this status.
OperationDenied.InstanceStatusLimitOpError	This operation cannot be performed on an instance in this status.
OperationDenied.PostPaidPayModeError	Pay-as-you-go instances cannot be renewed.
OperationDenied.VpcDeniedError	You do not have the permission to operate the VPC.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.
ResourceUnavailable.ResourceNoPermission	No permission for the VPC.
ResourceUnavailable.VpcResourceNotFound	Failed to get the information of the VPC where the instance resides.



# ModifyDBInstancesProject

最近更新时间：2023-10-13 09:42:53

## 1. API Description

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

This API is used to modify the project of an instance.

A maximum of 100 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: ModifyDBInstancesProject.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceIds.N	Yes	Array of String	List of instance IDs. Note that currently you cannot manipulate multiple instances at the same time. Only one instance ID can be passed in here.
ProjectId	Yes	String	ID of the new project

## 3. Output Parameters

Parameter	Type	Description
-----------	------	-------------

Name		
Count	Integer	Number of successfully transferred instances
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 u200cu200cModifying the projects in batches

u200cu200cThis example shows you how to modify the projects in batches.

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: ModifyDBInstancesProject
<Common request parameters>

{
  "ProjectId": "10467",
  "DBInstanceIdSet": [
    "postgres-lnp6j6172",
    "postgres-6bwgamo3"
  ]
}
```

#### Output Example

```
{
  "Response": {
    "RequestId": "08fdf411-5d39-44f2-8e1d-a58ee60b237d",
    "Count": 2
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
AuthFailure.UnauthorizedOperation	Authentication failed.
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.CdbCgwConnectError	Failed to get project information. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
FailedOperation.UpdateResourceProjectTagValueError	Failed to modify the resource tag.
InternalError.DBError	Backend database execution error.
InternalError.InternalHttpServerError	An exception occurred while executing the request.
InternalError.SystemError	System error. When this error occurs, please contact

	customer service for assistance.
InvalidParameter	Parameter error.
InvalidParameterValue.IllegalProjectId	Invalid <code>ProjectId</code> .
InvalidParameterValue.InstanceNotExist	The current instance does not exist.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
InvalidParameterValue.ParameterHandleError	Failed to process the parameter. Please check if the parameter value is valid.
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.InstanceAccessDeniedError	You do not have the permission to operate this resource.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.

# ModifyDBInstanceName

最近更新时间：2023-10-13 09:42:54

## 1. API Description

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

This API is used to rename a TencentDB for PostgreSQL instance.

A maximum of 100 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: ModifyDBInstanceName.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceid	Yes	String	Database instance ID in the format of postgres-6fego161
InstanceName	Yes	String	Instance name, which can contain up to 60 letters, digits, hyphens, and symbols (_-). If this parameter is not specified, "Unnamed" will be displayed by default.

## 3. Output Parameters

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Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Renaming the instance "postgres-6fego161" to "testModifyInstanceName"

This example shows you how to modify the instance name to "testModifyInstanceName".

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: ModifyDBInstanceName
<Common request parameters>

{
  "InstanceName": "testModifyInstanceName",
  "DBInstanceId": "postgres-6fego161"
}
```

#### Output Example

```
{
  "Response": {
    "RequestId": "8a61e500-aa33-454c-9ec2-da2a368c39ab"
  }
}
```

### Example2 Renaming the instance "postgres-6ougo465" (operation failed)

This example shows you how to modify the instance name (operation failed).

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: ModifyDBInstanceName
<Common request parameters>
```

```
{
  "InstanceName": "testModifyInstanceName",
  "DBInstanceId": "postgres-6ougo465"
}
```

### Output Example

```
{
  "Response": {
    "RequestId": "8a61f510-aa33-454c-9ec2-dq2a368c39ab",
    "Error": {
      "Message": "Failed to get instance",
      "Code": "InternalServerError.DBError"
    }
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
AuthFailure.UnauthorizedOperation	Authentication failed.
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
FailedOperation.OssAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
InternalError.DBError	Backend database execution error.
InternalError.InternalHttpServerError	An exception occurred while executing the request.
InternalError.SystemError	System error. When this error occurs, please contact customer service for assistance.
InvalidParameter	Parameter error.
InvalidParameterValue.InstanceNotExist	The current instance does not exist.
InvalidParameterValue.InvalidAccountFormat	Incorrect account format.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
InvalidParameterValue.ParameterCharacterError	Invalid parameter. The parameter can contain only letters, digits, underscores, and hyphens.
InvalidParameterValue.ParameterHandleError	Failed to process the parameter. Please check if the parameter value is valid.
InvalidParameterValue.ParameterLengthLimitError	The length of parameter exceeds the limit.
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.InstanceAccessDeniedError	You do not have the permission to operate this resource.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.



# DestroyDBInstance

最近更新时间：2023-10-13 09:42:55

## 1. API Description

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

This API is used to terminate an isolated instance by specifying the `DBInstanceId` parameter. The data of a terminated instance will be deleted and cannot be recovered. Be cautious with this API calling. Only the instance in isolation can be terminated.

A maximum of 50 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DestroyDBInstance.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceId	Yes	String	The ID of the instance to be eliminated

## 3. Output Parameters

Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for

locating a problem.

## 4. Example

### Example1 Terminating a TencentDB for PostgreSQL instance

This example shows you how to terminate the u200dinstance "postgres-19nmz2xb".

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DestroyDBInstance
<Common request parameters>

{
  "DBInstanceId": "postgres-19nmz2xb"
}
```

#### Output Example

```
{
  "Response": {
    "RequestId": "6ace8140-6b9e-4e81-a8ad-ef3f92b2aa90"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)

- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
AccountNotExist	The current account does not exist.
AuthFailure.UnauthorizedOperation	Authentication failed.
FailedOperation.CMQResponseError	Failed to access CMQ.
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DeleteResourceProjectTagError	Failed to unbind resources from a project.
FailedOperation.DeleteResourcesToTagError	Failed to unbind the resource from the tag.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
FailedOperation.LimitOperation	Operations are not allowed on the instance.
FailedOperation.OperateFrequencyLimitedError	The operation frequency limit is exceeded. Try again later. If the problem persists, contact customer service.
FailedOperation.PostPaidUnblockError	Failed to unfreeze the account of a pay-as-you-go instance. Please try again later. If the problem persists, please contact customer service.
FailedOperation.QueryPriceFailed	Failed to query the price.
FailedOperation.TradeAccessError	Failed to access the billing platform. Please try again later. If the problem persists, please contact customer service.

InternalError.DBError	Backend database execution error.
InternalError.FlowError	Failed to create the flow.
InternalError.InternalHttpServerError	An exception occurred while executing the request.
InternalError.SystemError	System error. When this error occurs, please contact customer service for assistance.
InvalidAccountStatus	The current account status is incorrect, so the operation is not allowed.
InvalidInstanceStatus	Incorrect instance status.
InvalidParameter	Parameter error.
InvalidParameterValue.IllegalInstanceChargeType	Incorrect billing mode.
InvalidParameterValue.InstanceNotExist	The current instance does not exist.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
InvalidParameterValue.ParameterHandleError	Failed to process the parameter. Please check if the parameter value is valid.
InvalidParameterValue.StructParseFailed	An error occurred while parsing parameters.
LimitOperation	Operations are not allowed on the instance.
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.InstanceAccessDeniedError	You do not have the permission to operate this resource.
OperationDenied.InstanceStatusLimitOpError	This operation cannot be performed on an instance in this status.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.
ResourceUnavailable.InvalidInstanceStatus	Incorrect instance status.
StructParseFailed	An error occurred while parsing parameters.
SystemError	System error. When this error occurs, please contact customer service for assistance.
UnknownError	Unknown error. When this error occurs, please contact customer service for assistance.

# IsolateDBInstances

最近更新时间：2023-10-13 09:42:54

## 1. API Description

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

This API is used to isolate an instance.

A maximum of 100 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: IsolateDBInstances.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceIds.N	Yes	Array of String	List of instance IDs. Note that currently you cannot isolate multiple instances at the same time. Only one instance ID can be passed in here.

## 3. Output Parameters

Parameter Name	Type	Description

RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.
-----------	--------	--

## 4. Example

### Example1 Isolating an instance

This example shows you how to u200cisolate an instance.

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: IsolateDBInstances
<Common request parameters>

{
  "DBInstanceIdSet": [
    "postgres-xxxxxxx"
  ]
}
```

#### Output Example

```
{
  "Response": {
    "RequestId": "d43b2a9f-070c-480b-a0bb-7c210428cfe8"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)

- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
AuthFailure	CAM signature/authentication error.
AuthFailure.UnauthorizedOperation	Authentication failed.
DBError	Backend database execution error.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAffectedError	Data operation failed. Please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
FailedOperation.FlowCreateError	Failed to create a task. Please try again later. If the problem persists, please contact customer service.
FailedOperation.GetInstanceByResourceIdError	Failed to query the instance information. Please try again later.
FailedOperation.InvalidAccountStatus	The account status is incorrect, so the operation is not allowed.
FailedOperation.OperateFrequencyLimitedError	The operation frequency limit is exceeded. Try again later. If the problem persists, contact customer service.
FailedOperation.QueryTradeStatusError	Failed to query the order status.
FailedOperation.TradeAccessError	Failed to access the billing platform. Please try again

	later. If the problem persists, please contact customer service.
FailedOperation.TradeCreateError	Failed to request the billing platform to create an order.
FailedOperation.TradePayOrdersError	Failed to request to pay for the order.
FailedOperation.TradeQueryOrderError	Failed to query order information. Please try again later. If the problem persists, please contact customer service.
FailedOperation.TradeQueryPriceError	Failed to query pricing information. Please try again later. If the problem persists, please contact customer service.
InstanceNotExist	The current instance does not exist.
InternalError.InstanceDataError	Failed to access database management service. Please contact customer service.
InternalError.InternalHttpServerError	An exception occurred while executing the request.
InvalidInstanceStatus	Incorrect instance status.
InvalidParameter	Parameter error.
InvalidParameter.TradeAccessDeniedError	Incorrect PID
InvalidParameterValue	Invalid parameter value.
InvalidParameterValue.DataConvertError	Failed to convert data format. Please contact customer service.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
LimitExceeded	Quota limit exceeded.
LimitOperation	Operations are not allowed on the instance.
MissingParameter	Missing parameters.
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.DTSInstanceStatusError	The target instance failed the status check.
OperationDenied.InstanceAccessDeniedError	You do not have the permission to operate this resource.
OperationDenied.InstanceStatusLimitError	This operation cannot be performed on an instance in this status.
OperationDenied.InstanceStatusLimitOpError	This operation cannot be performed on an instance in



	this status.
RegionNotSupported	The region is not supported.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.

# DisIsolateDBInstances

最近更新时间：2023-10-13 09:42:55

## 1. API Description

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

This API is used to remove one or more instances from isolation.

A maximum of 100 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DisIsolateDBInstances.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceIdsSet.N	Yes	Array of String	Instance ID list. Currently, you can't remove multiple instances from isolation in batches. Only one instance ID can be passed in here.
Period	No	Integer	Validity period in months <ul style="list-style-type: none"><li>Monthly subscription: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 24, 36.</li><li>Pay-as-you-go: 1.</li></ul>
AutoVoucher	No	Boolean	Whether to use vouchers. Valid values: <ul style="list-style-type: none"><li>true: Yes.</li></ul> u200c

			<ul style="list-style-type: none"> <li><code>false</code> : No.</li> </ul> Default value: <code>false</code> .
VoucherIds.N	No	Array of String	Voucher ID list

### 3. Output Parameters

Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Removing an instance from isolation

u200cThis example shows you how to remove an instance from isolation.

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DisIsolateDBInstances
<Common request parameters>

{
  "Period": "1",
  "AutoVoucher": "false",
  "DBInstanceIdSet": [
    "postgres-xxxxxxx"
  ]
}
```

#### Output Example

```
{
  "Response": {
    "RequestId": "ad1ca88b-5cc8-4c4c-ab10-a882123f8daa"
```

```
}  
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
AuthFailure	CAM signature/authentication error.
FailedOperation.CamAuthFailed	CAM authentication failed.
FailedOperation.CamCheckResourceError	Failed to get permissions. Please try again later. If the problem persists, please contact customer service.
FailedOperation.CamCheckResourceFailed	Failed to check resource permissions through CAM.
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAccessError	Failed to access database management service.

	Please try again later. If the problem persists, please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
FailedOperation.FlowCreateError	Failed to create a task. Please try again later. If the problem persists, please contact customer service.
FailedOperation.InvalidTradeOperate	Billing error. Corresponding purchase/renewal/configuration change operations are not allowed for the current instance.
FailedOperation.QueryTradeStatusError	Failed to query the order status.
FailedOperation.TradeAccessError	Failed to access the billing platform. Please try again later. If the problem persists, please contact customer service.
FailedOperation.TradeCreateError	Failed to request the billing platform to create an order.
FailedOperation.TradePayOrdersError	Failed to request to pay for the order.
FailedOperation.TradeQueryOrderError	Failed to query order information. Please try again later. If the problem persists, please contact customer service.
FailedOperation.TradeQueryPriceError	Failed to query pricing information. Please try again later. If the problem persists, please contact customer service.
InternalServerError.InternalHttpServerError	An exception occurred while executing the request.
InvalidInstanceStatus	Incorrect instance status.
InvalidParameter	Parameter error.
InvalidParameter.ParameterCheckError	Failed to check the parameter.
InvalidParameter.TradeAccessDeniedError	Incorrect PID
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
InvalidParameterValue.ParameterCharacterLimitError	The parameter is invalid. Please modify it and try again.
InvalidParameterValue.ParameterLengthLimitError	The length of parameter exceeds the limit.
InvalidParameterValue.StructParseFailed	An error occurred while parsing parameters.

LimitExceeded	Quota limit exceeded.
LimitOperation	Operations are not allowed on the instance.
MissingParameter	Missing parameters.
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.InstanceAccessDeniedError	You do not have the permission to operate this resource.
OperationDenied.InstanceStatusDeniedError	This operation cannot be performed on an instance in this status.
OperationDenied.InstanceStatusLimitError	This operation cannot be performed on an instance in this status.
OperationDenied.InstanceStatusLimitOpError	This operation cannot be performed on an instance in this status.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.
UnknownParameter	Unknown parameter error.

# ModifySwitchTimePeriod

最近更新时间：2023-10-13 09:42:53

## 1. API Description

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

This API is used to perform a primary-standby switch for an instance waiting for the switch after it is upgraded.

A maximum of 100 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: ModifySwitchTimePeriod.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceId	Yes	String	The ID of the instance waiting for a switch
SwitchTag	Yes	Integer	Valid value: <input type="text" value="0"/> (switch immediately)

## 3. Output Parameters

Parameter Name	Type	Description
----------------	------	-------------

RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.
-----------	--------	--

## 4. Example

### Example1 Performing switch now

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: ModifySwitchTimePeriod
<Common request parameters>

{
  "DBInstanceId": "postgres-19nmz2xb",
  "SwitchTag": "0"
}
```

#### Output Example

```
{
  "Response": {
    "RequestId": "6ace8140-6b9e-4e81-a8ad-ef3f92b2aa90"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)



- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
AuthFailure	CAM signature/authentication error.
FailedOperation.CamAuthFailed	CAM authentication failed.
FailedOperation.CamCheckResourceError	Failed to get permissions. Please try again later. If the problem persists, please contact customer service.
FailedOperation.CamCheckResourceFailed	Failed to check resource permissions through CAM.
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
FailedOperation.QuerySpecError	Failed to query specifications. Please try again later. If the problem persists, please contact customer service.
InternalError.InternalHttpServerError	An exception occurred while executing the request.
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.InstanceAccessDeniedError	You do not have the permission to operate this resource.
OperationDenied.InstanceStatusLimitOpError	This operation cannot be performed on an instance in this status.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.

UnknownError

Unknown error. When this error occurs, please contact customer service for assistance.

# ModifyDBInstanceSpec

最近更新时间：2023-10-13 09:42:53

## 1. API Description

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

This API is used to modify instance specifications, including memory and disk size.

A maximum of 100 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: ModifyDBInstanceSpec.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceCld	Yes	String	Instance ID in the format of postgres-6bwgamo3.
Memory	Yes	Integer	Instance memory size in GiB after modification.
Storage	Yes	Integer	Instance disk size in GiB after modification.
AutoVoucher	No	Integer	Whether to use vouchers automatically. Valid values: <ul style="list-style-type: none"><li>0 : No.</li><li>1 : Yes.</li></ul> Default value: 0 .

VoucherIds.N	No	Array of String	Voucher ID list. Currently, you can specify only one voucher.
ActivityId	No	Integer	Campaign ID.
SwitchTag	No	Integer	Switch time for the specified instance after configuration modification. <ul style="list-style-type: none"> <li>0 : Switch now.</li> <li>1 : Switch at the specified time.</li> <li>2 : Switch in the maintenance time.</li> </ul> Default value: 0 .
SwitchStartTime	No	String	Switch start time in the format of HH:MM:SS , such as 01:00:00. When SwitchTag is 0 or 2, this parameter becomes invalid.
SwitchEndTime	No	String	Switch end time in the format of HH:MM:SS , such as 01:30:00. When SwitchTag is 0 or 2, this parameter becomes invalid.

### 3. Output Parameters

Parameter Name	Type	Description
DealName	String	Order ID.
BillId	String	Bill ID of frozen fees.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Modifying instance configurations

u200cThis example shows you how to modify the configuration of the instance "postgres-6bwgamo3" to 2 GB MEM and 200 GB storage.

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
```

```
Content-Type: application/json
X-TC-Action: ModifyDBInstanceSpec
<Common request parameters>

{
  "Storage": "200",
  "DBInstanceId": "postgres-6bwgamo3",
  "Memory": "2"
}
```

## Output Example

```
{
  "Response": {
    "RequestId": "08fdf411-5d39-44f2-8e1d-a58ee60b237d",
    "DealName": "201806127634",
    "BillId": "123"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
FailedOperation	Operation failed.
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.CreateOrderFailed	Failed to create the renewal order.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
FailedOperation.PayOrderFailed	Failed to make order payment.
FailedOperation.PreCheckError	Pre-check failed
FailedOperation.QueryPriceFailed	Failed to query the price.
FailedOperation.QuerySpecError	Failed to query specifications. Please try again later. If the problem persists, please contact customer service.
InternalError.InternalHttpServerError	An exception occurred while executing the request.
InvalidParameter.ParameterCheckError	Failed to check the parameter.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.InstanceStatusLimitError	This operation cannot be performed on an instance in this status.
OperationDenied.InstanceStatusLimitOpError	This operation cannot be performed on an instance in this status.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.

# ModifyDBInstanceDeployment

最近更新时间：2023-10-13 09:42:54

## 1. API Description

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

This API is used to modify the AZs where the nodes of a source instance reside.

A maximum of 100 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: ModifyDBInstanceDeployment.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceid	Yes	String	Instance ID.
DBNodeSet.N	Yes	Array of <a href="#">DBNode</a>	Deployment information of the instance node, which will display the information of each AZ when the instance node is deployed across multiple AZs. The information of AZ can be obtained from the <code>Zone</code> field in the returned value of the <a href="#">DescribeZones</a> API.
SwitchTag	Yes	Integer	Switch time for the specified instance after configuration modification. <ul style="list-style-type: none"><li><code>0</code> : Switch now.</li></ul>

			<ul style="list-style-type: none"> <li>1 : Switch at the specified time.</li> <li>2 : Switch in the maintenance time.</li> </ul> Default value: 0 .
SwitchStartTime	No	String	Switch start time in the format of HH:MM:SS , such as 01:00:00. When SwitchTag is 0 or 2, this parameter becomes invalid.
SwitchEndTime	No	String	Switch end time in the format of HH:MM:SS , such as 01:30:00. When SwitchTag is 0 or 2, this parameter becomes invalid.

### 3. Output Parameters

Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Changing instance deployment mode to multi-AZ deployment

This example shows you how to modify the node deployment of instance "postgres-abcd1234" so that the primary node resides in Guangzhou Zone 1 and the standby node in Guangzhou Zone 2.

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: ModifyDBInstanceDeployment
<Common request parameters>

{
  "SwitchStartTime": "12:00:00",
  "DBNodeSet": [
    {
      "Role": "Standby",
      "Zone": "ap-guangzhou-2"
    },
  ],
}
```



```
{
  "Role": "Primary",
  "Zone": "ap-guangzhou-1"
},
{
  "DBInstanceId": "postgres-abcd1234",
  "SwitchTag": "1",
  "SwitchEndTime": "12:30:00"
}
```

### Output Example

```
{
  "Response": {
    "RequestId": "08fdf411-5d39-44f2-8e1d-a58ee60b237d"
  }
}
```

### Example2 Changing instance deployment mode to single-AZ deployment

This example shows you how to modify the node deployment of instance "postgres-abcd1234" so that both primary and standby nodes reside in Guangzhou Zone 3.

### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: ModifyDBInstanceDeployment
<Common request parameters>
```

```
{
  "SwitchStartTime": "12:00:00",
  "DBNodeSet": [
    {
      "Role": "Standby",
      "Zone": "ap-guangzhou-3"
    },
    {
      "Role": "Primary",
      "Zone": "ap-guangzhou-3"
    }
  ],
  "DBInstanceId": "postgres-abcd1234",
  "SwitchTag": "1",
}
```

```
"SwitchEndTime": "12:30:00"
}
```

### Output Example

```
{
  "Response": {
    "RequestId": "08fdf411-5d39-44f2-8e1d-a58ee60b237d"
  }
}
```

## 5. Developer Resources

### SDK

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- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please

	try again later. If the problem persists, please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
InternalServerError.InternalHttpServerError	An exception occurred while executing the request.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
InvalidParameterValue.InvalidZoneIdError	Invalid availability zone.
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.InstanceStatusLimitError	This operation cannot be performed on an instance in this status.
OperationDenied.InstanceStatusLimitOpError	This operation cannot be performed on an instance in this status.

# DescribeEncryptionKeys

最近更新时间：2023-10-13 09:42:55

## 1. API Description

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

This API is used to query the instance key list.

A maximum of 1000 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeEncryptionKeys.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceId	Yes	String	Instance ID

## 3. Output Parameters

Parameter Name	Type	Description
EncryptionKeys	Array of	Instance key list

	<a href="#">EncryptionKey</a>	Note: This field may return <code>null</code> , indicating that no valid value can be obtained.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 DescribeEncryptionKeys

This example shows you how to get the list of instance keys.

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeEncryptionKeys
<Common request parameters>

{
  "DBInstanceId": " postgres-abcdefg"
}
```

#### Output Example

```
{
  "Response": {
    "EncryptionKeys": [
      {
        "CreateTime": "2022-03-24 10:39:14",
        "DEKCipherTextBlob": "xxxxxxxxxxxx",
        "IsEnabled": 1,
        "KeyAlias": "PGSQL-KMS",
        "KeyId": " f4d88aa7-ae72-11ec-9fcc-5254007ffd46",
        "KeyRegion": "ap-guangzhou"
      }
    ],
    "RequestId": "xxxxxxxx"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
FailedOperation.FailedOperationError	Operation failed. Please try again later.
InternalServerError.InternalHttpServerError	An exception occurred while executing the request.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
OperationDenied.CamDeniedError	This operation cannot be performed.

# CreateDBInstances

最近更新时间：2023-10-13 09:42:56

## 1. API Description

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

This API is used to create (but not initialize) one or more TencentDB for PostgreSQL instances. This API is disused and replaced by the [CreateInstances](#) API.

A maximum of 100 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: CreateDBInstances.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
SpecCode	Yes	String	Purchasable specification ID, which can be obtained through the <code>SpecCode</code> field in the returned value of the <code>DescribeClasses</code> API.
Storage	Yes	Integer	Instance capacity size in GB.
InstanceCount	Yes	Integer	Number of instances purchased at a time. Value range: 1-100.
Period	Yes	Integer	Length of purchase in months. Currently, only 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 24, and 36 are supported.

Zone	Yes	String	AZ ID, which can be obtained through the <code>Zone</code> field in the returned value of the <code>DescribeZones</code> API.
ProjectId	No	Integer	Project ID.
DBVersion	No	String	PostgreSQL version. If it is specified, an instance running the latest kernel of PostgreSQL <code>DBVersion</code> will be created. You must pass in at least one of the following parameters: <code>DBVersion</code> , <code>DBMajorVersion</code> , <code>DBKernelVersion</code> .
InstanceChargeType	No	String	Instance billing type.
AutoVoucher	No	Integer	Whether to automatically use vouchers. 1: yes, 0: no. Default value: no.
VoucherIds.N	No	Array of String	Voucher ID list (only one voucher can be specified currently).
VpcId	No	String	VPC ID.
SubnetId	No	String	VPC subnet ID.
AutoRenewFlag	No	Integer	Renewal flag. 0: normal renewal (default), 1: auto-renewal.
ActivityId	No	Integer	Activity ID
Name	No	String	Instance name (which will be supported in the future)
NeedSupportIpv6	No	Integer	Whether to support IPv6 address access. Valid values: 1 (yes), 0 (no)
TagList.N	No	Array of Tag	The information of tags to be associated with instances. This parameter is left empty by default.
SecurityGroupIds.N	No	Array of String	Security group ID
DBMajorVersion	No	String	PostgreSQL major version. If it is specified, an instance running the latest kernel of PostgreSQL <code>DBMajorVersion</code> will be created. You must pass in at least one of the following parameters: <code>DBMajorVersion</code> , <code>DBVersion</code> , <code>DBKernelVersion</code> .
DBKernelVersion	No	String	PostgreSQL kernel version. If it is specified, an instance running the latest kernel of PostgreSQL <code>DBKernelVersion</code> will be created. You must pass in one



of the following parameters: DBKernelVersion, DBVersion, DBMajorVersion.

### 3. Output Parameters

Parameter Name	Type	Description
DealNames	Array of String	Order number list. Each instance corresponds to an order number.
BillId	String	Bill ID of frozen fees
DBInstanceIds	Array of String	ID set of instances which have been created successfully. The parameter value will be returned only when the billing mode is postpaid.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Creating a TencentDB for PostgreSQL instance

This example shows you how to purchase an instance.

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: CreateDBInstances
<Common request parameters>

{
  "InstanceCount": "1",
  "AutoRenewFlag": "1",
  "Zone": "ap-guangzhou-5",
  "DBVersion": "12.4",
  "Storage": "10",
  "Period": "1",
  "SpecCode": "cdb.pg.z1.2g",
```

```
"InstanceChargeType": "prepaid",  
"AutoVoucher": "0"  
}
```

### Output Example

```
{  
  "Response": {  
    "RequestId": "6ace8140-6b9e-4e81-a8ad-ef3f92b2aa90",  
    "DealNames": [  
      "20180119110001"  
    ],  
    "DBInstanceIdSet": [  
      "postgres-xxxx"  
    ],  
    "BillId": "xxxxxxxxxx"  
  }  
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
AuthFailure.UnauthorizedOperation	Authentication failed.
FailedOperation.AllocateQuotasError	Failed to request a quota for resource tags.
FailedOperation.CamAuthFailed	CAM authentication failed.
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.CdbCgwConnectError	Failed to get project information. Please try again later. If the problem persists, please contact customer service.
FailedOperation.CreateBasicNetworkDeniedError	Classic network creation is unsupported.
FailedOperation.CreateOrderFailed	Failed to create the renewal order.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAffectedError	Data operation failed. Please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
FailedOperation.FlowCreateError	Failed to create a task. Please try again later. If the problem persists, please contact customer service.
FailedOperation.GetSubnetError	Failed to query VPC subnets.
FailedOperation.GetVpcInfoError	Failed to query VPC information. Please try again later. If the problem persists, please contact customer service.
FailedOperation.InvalidTradeOperate	Billing error. Corresponding purchase/renewal/configuration change operations are not allowed for the current instance.
FailedOperation.PayOrderFailed	Failed to make order payment.

FailedOperation.QueryPriceFailed	Failed to query the price.
FailedOperation.QuerySpecError	Failed to query specifications. Please try again later. If the problem persists, please contact customer service.
FailedOperation.QueryVpcFailed	Failed to query VPC.
FailedOperation.QueryVpcFalied	Failed to get VPC details.
FailedOperation.ServiceAccessError	Failed to access internal service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.StorageMemoryCheckError	The memory and storage capacity to which an instance is upgraded should be higher than its original memory and storage capacity.
FailedOperation.TradeCreateError	Failed to request the billing platform to create an order.
FailedOperation.TradePayOrdersError	Failed to request to pay for the order.
InternalError.CgwError	CGW error.
InternalError.CnsError	Basic network error.
InternalError.DBError	Backend database execution error.
InternalError.DfwError	DFW error.
InternalError.FlowError	Failed to create the flow.
InternalError.InternalHttpServerError	An exception occurred while executing the request.
InternalError.SystemError	System error. When this error occurs, please contact customer service for assistance.
InternalError.UnknownError	Unknown error. When this error occurs, please contact customer service for assistance.
InternalError.VpcError	VPC error.
InvalidParameter	Parameter error.
InvalidParameter.ParameterCheckError	Failed to check the parameter.

InvalidParameter.TradeAccessDeniedError	Incorrect PID
InvalidParameter.VpcNotFoundError	Failed to query VPC information.
InvalidParameterValue.AccountExist	The current account already exists.
InvalidParameterValue.BadSpec	The instance specification to upgrade to is not purchasable.
InvalidParameterValue.DataConvertError	Failed to convert data format. Please contact customer service.
InvalidParameterValue.IllegalInstanceChargeType	Incorrect billing mode.
InvalidParameterValue.IllegalProjectId	Invalid <code>ProjectId</code> .
InvalidParameterValue.IllegalRegion	Invalid <code>Region</code> parameter.
InvalidParameterValue.IllegalZone	Invalid <code>Zone</code> parameter.
InvalidParameterValue.InterfaceNameNotFound	Incorrect <code>ACTION</code> .
InvalidParameterValue.InvalidAccountFormat	Incorrect account format.
InvalidParameterValue.InvalidAccountName	The current account name cannot be a reserved character.
InvalidParameterValue.InvalidCharset	Incorrect database character set. Currently, only <code>UTF8</code> and <code>LATIN1</code> are supported.
InvalidParameterValue.InvalidInstanceNum	The number of purchased instances exceeds the limit.
InvalidParameterValue.InvalidOrderNum	Billing error. Invalid order type ID.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
InvalidParameterValue.InvalidPasswordFormat	Incorrect password format.
InvalidParameterValue.InvalidPid	Incorrect <code>PID</code> parameter.
InvalidParameterValue.InvalidZoneldError	Invalid availability zone.
InvalidParameterValue.ParameterCharacterError	Invalid parameter. The parameter can contain only letters, digits, underscores, and hyphens.
InvalidParameterValue.ParameterHandleError	Failed to process the parameter. Please check if the parameter value is valid.

InvalidParameterValue.ParameterLengthLimitError	The length of parameter exceeds the limit.
InvalidParameterValue.ParameterOutOfRangeError	Invalid parameter values.
InvalidParameterValue.RegionNotSupported	The current region is not supported.
InvalidParameterValue.SpecNotRecognizedError	Failed to identify the specification ({{1}}).
InvalidParameterValue.StructParseFailed	An error occurred while parsing parameters.
InvalidPid	Incorrect <code>PID</code> parameter.
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.InstanceStatusLimitOpError	This operation cannot be performed on an instance in this status.
OperationDenied.UserNotAuthenticatedError	You need to verify your identity to make a purchase.
OperationDenied.VpcDeniedError	You do not have the permission to operate the VPC.
ResourceInsufficient.ResourceNotEnough	There are not enough resources to purchase instances of this specification in the current region.
ResourceUnavailable.InvalidInstanceStatus	Incorrect instance status.
ResourceUnavailable.ResourceNoPermission	No permission for the VPC.
ResourceUnavailable.VpcResourceNotFound	Failed to get the information of the VPC where the instance resides.
UnauthorizedOperation.UserHasNoRealnameAuthentication	Unverified user.
UnknownError	Unknown error. When this error occurs, please contact customer service for assistance.

# Read-only Replica APIs

## ModifyDBInstanceReadOnlyGroup

最近更新时间：2023-10-13 09:42:47

### 1. API Description

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

This API is used to modify the RO group of an instance.

A maximum of 100 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

### 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: ModifyDBInstanceReadOnlyGroup.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceId	Yes	String	Instance ID
ReadOnlyGroupId	Yes	String	ID of the RO group to which the read-only replica belongs
NewReadOnlyGroupId	Yes	String	ID of the new RO group into which the read-only replica will move

### 3. Output Parameters

Parameter Name	Type	Description
FlowId	Integer	Task ID
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 ModifyDBInstanceReadOnlyGroup

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: ModifyDBInstanceReadOnlyGroup
<Common request parameters>

{
  "NewReadOnlyGroupId": "NewGroup",
  "ReadOnlyGroupId": "OldGroup",
  "DBInstanceId": "postgres-k95qzetn"
}
```

#### Output Example

```
{
  "Response": {
    "RequestId": "d43b2a9f-070c-480b-a0bb-7c210428cfe8",
    "FlowId": 912
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.



- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
FailedOperation.CamAuthFailed	CAM authentication failed.
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
FailedOperation.FlowCreateError	Failed to create a task. Please try again later. If the problem persists, please contact customer service.
FailedOperation.IllegalROInstanceNum	Invalid number of read-only replicas.
FailedOperation.ROGroupNotFound	The RO group does not exist.
InstanceNotExist	The current instance does not exist.
InternalServerError.InternalHttpServerError	An exception occurred while executing the request.
InternalServerError.SystemError	System error. When this error occurs, please contact customer service for assistance.

InvalidInstanceStatus	Incorrect instance status.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
InvalidParameterValue.InvalidReadOnlyGroupStatus	RO group in incorrect status
InvalidParameterValue.ParameterHandleError	Failed to process the parameter. Please check if the parameter value is valid.
InvalidParameterValue.ReadOnlyGroupNotExist	The RO group does not exist.
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.ROGroupStatusError	This operation cannot be performed on an RO group in this status.
OperationDenied.RoInstanceCountExceedError	The total number of read-only nodes should not exceed the upper limit.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.
ResourceUnavailable.InvalidInstanceStatus	Incorrect instance status.

# CreateReadOnlyGroup

最近更新时间：2023-10-13 09:42:47

## 1. API Description

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

This API is used to create an RO group.

A maximum of 100 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: CreateReadOnlyGroup.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
MasterDBInstanceId	Yes	String	Primary instance ID
Name	Yes	String	RO group name
ProjectId	No	Integer	Project ID
VpcId	No	String	VPC ID
SubnetId	No	String	Subnet ID

ReplayLagEliminate	No	Integer	Whether to remove a read-only replica from an RO group if the delay between the read-only replica and the primary instance exceeds the threshold. Valid values: <code>0</code> (no), <code>1</code> (yes).
ReplayLatencyEliminate	No	Integer	Whether to remove a read-only replica from an RO group if the sync log size difference between the read-only replica and the primary instance exceeds the threshold. Valid values: <code>0</code> (no), <code>1</code> (yes).
MaxReplayLag	No	Integer	Delay threshold in ms
MaxReplayLatency	No	Integer	Delayed log size threshold in MB
MinDelayEliminateReserve	No	Integer	The minimum number of read-only replicas that must be retained in an RO group
SecurityGroupIds.N	No	Array of String	Security group ID

### 3. Output Parameters

Parameter Name	Type	Description
ReadOnlyGroupId	String	RO group ID
FlowId	Integer	Task ID Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Creating RO group

##### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
```

```
Content-Type: application/json
X-TC-Action: CreateReadOnlyGroup
<Common request parameters>

{
  "MaxReplayLag": "0",
  "VpcId": "\"vpc-e0tfm161\"",
  "Name": "\"test\"",
  "ProjectId": "0",
  "MasterDBInstanceId": "\"postgres-k95qzetn\"",
  "MinDelayEliminateReserve": "0",
  "ReplayLagEliminate": "0",
  "SubnetId": "\"subnet-443a31v6\""
}
```

### Output Example

```
{
  "Response": {
    "RequestId": "d43b2a9f-070c-480b-a0bb-7c210428cfe8",
    "FlowId": 912,
    "ReadOnlyGroupId": "pgrogrp-dh6873gz"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
AuthFailure.UnauthorizedOperation	Authentication failed.
FailedOperation.AllocateQuotasError	Failed to request a quota for resource tags.
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.CreateBasicNetworkDeniedError	Classic network creation is unsupported.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
FailedOperation.FlowCreateError	Failed to create a task. Please try again later. If the problem persists, please contact customer service.
FailedOperation.GetVpcInfoError	Failed to query VPC information. Please try again later. If the problem persists, please contact customer service.
FailedOperation.IllegalROInstanceNum	Invalid number of read-only replicas.
FailedOperation.MasterInstanceQueryError	Failed to query the primary instance information.
FailedOperation.ROGroupNumExceedError	The maximum number of RO groups has been reached.
InternalServerError.InternalHttpServerError	An exception occurred while executing the request.
InternalServerError.SystemError	System error. When this error occurs, please contact customer service for assistance.
InvalidParameter	Parameter error.
InvalidParameter.ParameterCheckError	Failed to check the parameter.
InvalidParameter.VpcNotFound	Failed to query VPC information.

InvalidParameterValue.InterfaceNameNotFound	Incorrect <code>ACTION</code> .
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
InvalidParameterValue.ParameterCharacterError	Invalid parameter. The parameter can contain only letters, digits, underscores, and hyphens.
InvalidParameterValue.ParameterHandleError	Failed to process the parameter. Please check if the parameter value is valid.
InvalidParameterValue.ParameterLengthLimitError	The length of parameter exceeds the limit.
InvalidParameterValue.RegionNotSupported	The current region is not supported.
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.InstanceStatusLimitOpError	This operation cannot be performed on an instance in this status.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.
StructParseFailed	An error occurred while parsing parameters.
UnknownError	Unknown error. When this error occurs, please contact customer service for assistance.

# CreateReadOnlyDBInstance

最近更新时间：2023-11-14 14:48:40

## 1. API Description

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

This API is used to create read-only replicas.

A maximum of 100 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: CreateReadOnlyDBInstance.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
Zone	Yes	String	Primary AZ of an instance, such as "ap-guangzhou-3". The information of AZ can be obtained from the <code>Zone</code> field in the return value of the <a href="#">DescribeZones</a> API.
MasterDBInstanceId	Yes	String	ID of the primary instance to which the read-only instance belongs
SpecCode	Yes	String	Purchasable code, which can be obtained from the <code>SpecCode</code> field in the return value of the <a href="#">DescribeClasses</a> API.



Parameter Name	Required	Type	Description
Storage	Yes	Integer	Instance storage capacity in GB
InstanceCount	Yes	Integer	The number of instances to be purchased at a time. Value range: 1-10. To purchase more than 10 instances each time, you can make multiple calls.
Period	Yes	Integer	Validity period in months, valid values: <ul style="list-style-type: none"> <li>Monthly subscription: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 24, 36.</li> <li>Pay-as-you-go: 1.</li> </ul>
VpcId	No	String	VPC ID in the format of <code>vpc-xxxxxxx</code> , which can be obtained in the console or from the <code>unVpcId</code> field in the return value of the DescribeVpcEx API.
SubnetId	No	String	VPC subnet ID in the format of <code>subnet-xxxxxxx</code> which can be obtained in the console or from the <code>unSubnetId</code> field in the return value of the DescribeSubnets API.
InstanceChargeType	No	String	Instance billing mode. Valid values: <ul style="list-style-type: none"> <li><code>PREPAID</code>: Monthly subscription</li> <li><code>POSTPAID_BY_HOUR</code>: Pay-as-you-go</li> </ul> Default value: <code>PREPAID</code> . If the primary instance is pay-as-you-go, so is the read-only instance.
AutoVoucher	No	Integer	Whether to use vouchers automatically. Valid values: <ul style="list-style-type: none"> <li><code>0</code>: No.</li> <li><code>1</code>: Yes.</li> </ul> Default value: <code>0</code> .
VoucherIds.N	No	Array of String	Voucher ID list. Currently, you can specify only one voucher.
AutoRenewFlag	No	Integer	Auto-renewal flag. Valid values: <ul style="list-style-type: none"> <li><code>0</code>: Manual renewal.</li> <li><code>1</code>: Automatic renewal.</li> </ul> Default value: <code>0</code> .
ProjectId	No	Integer	Project ID
ActivityId	No	Integer	Special offer ID
ReadOnlyGroupId	No	String	RO group ID

Parameter Name	Required	Type	Description
TagList	No	Tag	The information of tags to be bound with the instance, which is left empty by default. This parameter can be obtained from the <code>Tags</code> field in the return value of the <a href="#">DescribeTags</a> API.
SecurityGroupIds.N	No	Array of String	Security group of the instance, which can be obtained from the <code>sgId</code> field in the return value of the <a href="#">DescribeSecurityGroups</a> API. If this parameter is not specified, the default security group will be bound.
NeedSupportIpv6	No	Integer	Whether IPv6 is supported. <ul style="list-style-type: none"> <li><code>0</code> : No.</li> <li><code>1</code> : Yes.</li> </ul> Default value: <code>0</code> .
Name	No	String	Instance name (which will be supported in the future)
DBVersion	No	String	(Disused) You don't need to specify a version, as the kernel version is as the same as that of the instance.

### 3. Output Parameters

Parameter Name	Type	Description
DealNames	Array of String	Order number list. Each instance corresponds to an order number.
BillId	String	Bill ID of frozen fees
DBInstanceIdsSet	Array of String	ID set of instances which have been created successfully. The parameter value will be returned only when the pay-as-you-go billing mode is used.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 CreateReadOnlyDBInstance

This example shows you how to create a read-only instance.

### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: CreateReadOnlyDBInstance
<Common request parameters>

{
  "InstanceCount": "1",
  "AutoRenewFlag": "1",
  "Zone": "ap-guangzhou-2",
  "MasterDBInstanceId": "Postgres-testmaster",
  "DBVersion": "9.3.5",
  "Storage": "10",
  "Period": "1",
  "SpecCode": "cdb.pg.z1.2g",
  "InstanceChargeType": "prepaid",
  "AutoVoucher": "0"
}
```

### Output Example

```
{
  "Response": {
    "RequestId": "6ace8140-6b9e-4e81-a8ad-ef3f92b2aa90",
    "DealNames": [
      "20180119110001"
    ],
    "DBInstanceIdSet": [
      "123"
    ],
    "BillId": "123"
  }
}
```

## 5. Developer Resources

### SDK

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- [Tencent Cloud SDK 3.0 for Java](#)
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- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
AuthFailure.UnauthorizedOperation	Authentication failed.
FailedOperation.AllocateQuotasError	Failed to request a quota for resource tags.
FailedOperation.CamAuthFailed	CAM authentication failed.
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.CdbCgwConnectError	Failed to get project information. Please try again later. If the problem persists, please contact customer service.
FailedOperation.CreateBasicNetworkDeniedError	Classic network creation is unsupported.
FailedOperation.CreateOrderFailed	Failed to create the renewal order.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.

Error Code	Description
FailedOperation.DatabaseAffectedError	Data operation failed. Please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
FailedOperation.GetSubnetError	Failed to query VPC subnets.
FailedOperation.GetVpcInfoError	Failed to query VPC information. Please try again later. If the problem persists, please contact customer service.
FailedOperation.InvalidTradeOperate	Billing error. Corresponding purchase/renewal/configuration change operations are not allowed for the current instance.
FailedOperation.PayOrderFailed	Failed to make order payment.
FailedOperation.PreCheckError	Pre-check failed
FailedOperation.QueryPriceFailed	Failed to query the price.
FailedOperation.QuerySpecError	Failed to query specifications. Please try again later. If the problem persists, please contact customer service.
FailedOperation.QueryVpcFailed	Failed to query VPC.
FailedOperation.QueryVpcFalied	Failed to get VPC details.
FailedOperation.ROGroupNotFoundError	The RO group does not exist.
FailedOperation.ROGroupNumExceedError	The maximum number of RO groups has been reached.
FailedOperation.ServiceAccessError	Failed to access internal service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.StorageMemoryCheckError	The memory and storage capacity to which an instance is upgraded should be higher than its original memory and storage capacity.
FailedOperation.TradeCreateError	Failed to request the billing platform to create an order.

Error Code	Description
FailedOperation.TradePayOrdersError	Failed to request to pay for the order.
InternalError.CgwError	CGW error.
InternalError.CnsError	Basic network error.
InternalError.DBError	Backend database execution error.
InternalError.DfwError	DFW error.
InternalError.FlowError	Failed to create the flow.
InternalError.InternalHttpServerError	An exception occurred while executing the request.
InternalError.SystemError	System error. When this error occurs, please contact customer service for assistance.
InternalError.UnknownError	Unknown error. When this error occurs, please contact customer service for assistance.
InternalError.VpcError	VPC error.
InvalidParameter	Parameter error.
InvalidParameter.ParameterCheckError	Failed to check the parameter.
InvalidParameter.TradeAccessDeniedError	Incorrect PID
InvalidParameter.VpcNotFoundError	Failed to query VPC information.
InvalidParameterValue.AccountExist	The current account already exists.
InvalidParameterValue.BadSpec	The instance specification to upgrade to is not purchasable.
InvalidParameterValue.DataConvertError	Failed to convert data format. Please contact customer service.
InvalidParameterValue.IllegalInstanceChargeType	Incorrect billing mode.
InvalidParameterValue.IllegalProjectId	Invalid <code>ProjectId</code> .
InvalidParameterValue.IllegalRegion	Invalid <code>Region</code> parameter.
InvalidParameterValue.IllegalZone	Invalid <code>Zone</code> parameter.

Error Code	Description
InvalidParameterValue.InterfaceNameNotFound	Incorrect <code>ACTION</code> .
InvalidParameterValue.InvalidAccountFormat	Incorrect account format.
InvalidParameterValue.InvalidAccountName	The current account name cannot be a reserved character.
InvalidParameterValue.InvalidCharset	Incorrect database character set. Currently, only <code>UTF8</code> and <code>LATIN1</code> are supported.
InvalidParameterValue.InvalidInstanceNum	The number of purchased instances exceeds the limit.
InvalidParameterValue.InvalidOrderNum	Billing error. Invalid order type ID.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
InvalidParameterValue.InvalidPasswordFormat	Incorrect password format.
InvalidParameterValue.InvalidPid	Incorrect <code>PID</code> parameter.
InvalidParameterValue.ParameterCharacterError	Invalid parameter. The parameter can contain only letters, digits, underscores, and hyphens.
InvalidParameterValue.ParameterHandleError	Failed to process the parameter. Please check if the parameter value is valid.
InvalidParameterValue.ParameterLengthLimitError	The length of parameter exceeds the limit.
InvalidParameterValue.RegionNotSupported	The current region is not supported.
InvalidParameterValue.StructParseFailed	An error occurred while parsing parameters.
InvalidPid	Incorrect <code>PID</code> parameter.
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.InstanceStatusLimitError	This operation cannot be performed on an instance in this status.
OperationDenied.InstanceStatusLimitOpError	This operation cannot be performed on an instance in this status.
OperationDenied.PayModeError	Unsupported billing mode

Error Code	Description
OperationDenied.ROGroupStatusError	This operation cannot be performed on an RO group in this status.
OperationDenied.RoInstanceCountExceedError	The total number of read-only nodes should not exceed the upper limit.
OperationDenied.UserNotAuthenticatedError	You need to verify your identity to make a purchase.
OperationDenied.VpcDeniedError	You do not have the permission to operate the VPC.
ResourceInsufficient.ResourceNotEnough	There are not enough resources to purchase instances of this specification in the current region.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.
ResourceUnavailable.InvalidInstanceStatus	Incorrect instance status.
ResourceUnavailable.ResourceNoPermission	No permission for the VPC.
ResourceUnavailable.VpcResourceNotFound	Failed to get the information of the VPC where the instance resides.
UnauthorizedOperation.UserHasNoRealnameAuthentication	Unverified user.
UnknownError	Unknown error. When this error occurs, please contact customer service for assistance.



# DeleteReadOnlyGroup

最近更新时间：2023-10-13 09:42:47

## 1. API Description

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

This API is used to delete an RO group.

A maximum of 100 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DeleteReadOnlyGroup.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
ReadOnlyGroupId	Yes	String	ID of the RO group to be deleted

## 3. Output Parameters

Parameter Name	Type	Description
FlowId	Integer	Task ID Note: this field may return <code>null</code> , indicating that no valid values can be obtained.

RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.
-----------	--------	--

## 4. Example

### Example1 Deleting RO group

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DeleteReadOnlyGroup
<Common request parameters>

{
  "ReadOnlyGroupId": "\"pgrogrp-k95qzetn\""}
}
```

#### Output Example

```
{
  "Response": {
    "FlowId": 1000,
    "RequestId": "d43b2a9f-070c-480b-a0bb-7c210428cfe8"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)

- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
FailedOperation.CamAuthFailed	CAM authentication failed.
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
FailedOperation.FlowCreateError	Failed to create a task. Please try again later. If the problem persists, please contact customer service.
FailedOperation.ROGroupCannotBeDeletedError	This RO group has at least one read-only replica, so it cannot be deleted.
FailedOperation.ROGroupNotFoundError	The RO group does not exist.
InternalError.FlowError	Failed to create the flow.
InternalError.InternalHttpServerError	An exception occurred while executing the request.
InternalError.SystemError	System error. When this error occurs, please contact customer service for assistance.
InvalidParameter	Parameter error.
InvalidParameterValue.InterfaceNameNotFound	Incorrect ACTION .
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value

InvalidParameterValue.ParameterHandleError	Failed to process the parameter. Please check if the parameter value is valid.
OperationDenied.CamDeniedError	This operation cannot be performed.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.
SystemError	System error. When this error occurs, please contact customer service for assistance.

# DescribeReadOnlyGroups

最近更新时间：2023-10-13 09:42:47

## 1. API Description

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

This API is used to query the list of RO groups.

A maximum of 1000 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeReadOnlyGroups.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
Filters.N	No	Array of <a href="#">Filter</a>	Filter instances by using one or more filters. Valid values: <code>db-master-instance-id</code> (filter by the primary instance ID in string), <code>read-only-group-id</code> (filter by the read-only group ID in string),
PageSize	No	Integer	The number of results per page. Default value: 10.
PageNumber	No	Integer	Specify which page is displayed. Default value: 1 (the first page).
OrderBy	No	String	Sorting criterion. Valid values: <code>ROGroupId</code> , <code>CreateTime</code> , <code>Name</code> .

OrderByType	No	String	Sorting order. Valid values: <code>desc</code> , <code>asc</code> .
-------------	----	--------	---

### 3. Output Parameters

Parameter Name	Type	Description
ReadOnlyGroupList	Array of <a href="#">ReadOnlyGroup</a>	RO group list
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Querying the list of read-only groups under a primary instance

This example shows you how to filter the list of read-only groups by specifying the primary instance ID `postgres-kpol3zgp` as a condition for the query.

#### Input Example

```
POST / HTTP/1.1Host: postgres.tencentcloudapi.comContent-Type: application/jsonX-TC-Action: DescribeReadOnlyGroups<common request parameters>{ "Filters": [ { "Name": "db-master-instance-id", "Values": [ "postgres-kpol3zgp" ] } ] }
```

#### Output Example

```
{
  "Response": {
    "ReadOnlyGroupList": [
      {
        "DBInstanceNetInfo": [
          {
            "Address": "",
            "Ip": "172.16.0.88",
            "NetType": "private",
            "Port": 5432,
            "ProtocolType": "postgresql",
            "Status": "opened",
            "SubnetId": "subnet-7aheme8u",
            "VpcId": "vpc-ql6jst9h"
          }
        ]
      }
    ]
  }
}
```

```
}
],
"MasterDBInstanceId": "postgres-kpol3zgp",
"MaxReplayLag": 0,
"MaxReplayLatency": 0,
"MinDelayEliminateReserve": 0,
"NetworkAccessList": null,
"ProjectId": 1076910,
"ReadOnlyDBInstanceList": [
{
"AppId": 251197262,
"AutoRenew": 0,
"CreateTime": "2023-05-17 15:24:26",
"DBCharset": "UTF8",
"DBEngine": "postgresql",
"DBEngineConfig": "",
"DBInstanceClass": "cdb.pg.sh1.2g",
"DBInstanceCpu": 1,
"DBInstanceId": "pgro-5objz9hu",
"DBInstanceMemory": 2,
"DBInstanceName": "auto_rotest",
"DBInstanceNetInfo": [
{
"Address": "",
"Ip": "172.16.0.134",
"NetType": "private",
"Port": 5432,
"ProtocolType": "postgresql",
"Status": "opened",
"SubnetId": "subnet-7aheme8u",
"VpcId": "vpc-ql6jst9h"
}
],
"DBInstanceStatus": "running",
"DBInstanceStorage": 10,
"DBInstanceType": "readonly",
"DBInstanceVersion": "standard",
"DBKernelVersion": "v9.5.25_r1.5",
"DBMajorVersion": "9.5",
"DBNodeSet": null,
"DBVersion": "9.5.25",
"ExpireTime": "0000-00-00 00:00:00",
"IsSupportTDE": 0,
"IsolatedTime": "0000-00-00 00:00:00",
"MasterDBInstanceId": "postgres-kpol3zgp",
"NetworkAccessList": null,
"OfflineTime": "0001-01-04 00:00:00",
```

```
"PayType": "postpaid",
"ProjectId": 0,
"ReadOnlyInstanceNum": 0,
"Region": "ap-guangzhou",
"StatusInReadOnlyGroup": "running",
"SubnetId": "subnet-7aheme8u",
"SupportIpv6": 0,
"TagList": [],
"Type": "SH02",
"Uid": 49,
"UpdateTime": "2023-05-17 07:25:35",
"VpcId": "vpc-ql6jst9h",
"Zone": "ap-guangzhou-3"
},
{
"ReadOnlyGroupId": "pgrogrp-htrtddr0",
"ReadOnlyGroupName": "autotest",
"Rebalance": 0,
"Region": "ap-guangzhou",
"ReplayLagEliminate": 0,
"ReplayLatencyEliminate": 0,
"Status": "ok",
"SubnetId": "subnet-7aheme8u",
"VpcId": "vpc-ql6jst9h",
"Zone": "ap-guangzhou-3"
},
{
"RequestId": "a28a102a-8c70-451c-96d7-04291218fbc1"
}
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

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- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)



- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
FailedOperation.CamAuthFailed	CAM authentication failed.
FailedOperation.CamCheckResourceError	Failed to get permissions. Please try again later. If the problem persists, please contact customer service.
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAffectedError	Data operation failed. Please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
InternalError.DBError	Backend database execution error.
InternalError.InternalHttpServerError	An exception occurred while executing the request.
InternalError.SystemError	System error. When this error occurs, please contact customer service for assistance.
InvalidParameterValue.DataConvertError	Failed to convert data format. Please contact customer service.
InvalidParameterValue.InterfaceNameNotFound	Incorrect <code>ACTION</code> .
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
InvalidParameterValue.ParameterHandleError	Failed to process the parameter. Please check if the parameter value is valid.

OperationDenied.CamDeniedError	This operation cannot be performed.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.

# ModifyReadOnlyGroupConfig

最近更新时间：2023-10-13 09:42:47

## 1. API Description

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

This API is used to modify RO group configuration.

A maximum of 100 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: ModifyReadOnlyGroupConfig.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
ReadOnlyGroupId	Yes	String	RO group ID
ReadOnlyGroupName	No	String	RO group name
ReplayLagEliminate	No	Integer	Whether to remove a read-only replica from an RO group if the delay between the read-only replica and the primary instance exceeds the threshold. Valid values: <code>0</code> (no), <code>1</code> (yes).
ReplayLatencyEliminate	No	Integer	Whether to remove a read-only replica from an RO

			group if the sync log size difference between the read-only replica and the primary instance exceeds the threshold. Valid values: <code>0</code> (no), <code>1</code> (yes).
MaxReplayLatency	No	Integer	Delayed log size threshold in MB
MaxReplayLag	No	Integer	Delay threshold in ms
Rebalance	No	Integer	Whether to enable automatic load balancing. Valid values: <code>0</code> (disable), <code>1</code> (enable).
MinDelayEliminateReserve	No	Integer	The minimum number of read-only replicas that must be retained in an RO group

### 3. Output Parameters

Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Modifying RO group configuration

##### Input Example

```

POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: ModifyReadOnlyGroupConfig
<Common request parameters>

{
  "MaxReplayLag": "0",
  "ReplayLagEliminate": "0",
  "MaxReplayLatency": "512",
  "MinDelayEliminateReserve": "0",
  "ReadOnlyGroupName": "\"test\"",
  "ReadOnlyGroupId": "\"vpc-e0t fm161\"",

```

```
"Rebalance": "1"
}
```

### Output Example

```
{
  "Response": {
    "RequestId": "d43b2a9f-070c-480b-a0bb-7c210428cfe8"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

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- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
FailedOperation.BaseNetworkAccessError	Failed to access classic network. Please try again later. If the problem persists, please contact customer service.
FailedOperation.CamAuthFailed	CAM authentication failed.

FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DeleteAllRoute	Failed to delete VPC routes.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
FailedOperation.ModifyROGroupError	Failed to modify RO group configuration.
FailedOperation.ROGroupNotFoundError	The RO group does not exist.
FailedOperation.ServiceAccessError	Failed to access internal service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.VPCResetServiceError	Failed to configure the VPC.
FailedOperation.VPCUpdateRouteError	Failed to update VPC routes.
InterfaceNameNotFound	<code>ACTION</code> input error.
InternalError.DBError	Backend database execution error.
InternalError.InternalHttpServerError	An exception occurred while executing the request.
InternalError.SystemError	System error. When this error occurs, please contact customer service for assistance.
InvalidParameter.ParameterCheckError	Failed to check the parameter.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
InvalidParameterValue.ParameterHandleError	Failed to process the parameter. Please check if the parameter value is valid.
InvalidParameterValue.ReadOnlyGroupNotExist	The RO group does not exist.
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.InstanceStatusLimitOpError	This operation cannot be performed on an instance in this status.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.

# AddDBInstanceToReadOnlyGroup

最近更新时间：2023-10-13 09:42:48

## 1. API Description

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

This API is used to add a read-only replica to an RO group.

A maximum of 100 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: AddDBInstanceToReadOnlyGroup.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceid	Yes	String	Instance ID
ReadOnlyGroupid	Yes	String	RO group ID

## 3. Output Parameters

Parameter Name	Type	Description

FlowId	Integer	Task ID
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Adding instance "postgres-k95qzetn" to RO group "pgrogrp-test"

#### Input Example

```

POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: AddDBInstanceToReadOnlyGroup
<Common request parameters>

{
  "ReadOnlyGroupId": "\"pgrogrp-test\"",
  "DBInstanceId": "\"postgres-k95qzetn\""
}

```

#### Output Example

```

{
  "Response": {
    "RequestId": "d43b2a9f-070c-480b-a0bb-7c210428cfe8",
    "FlowId": 912
  }
}

```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)



- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
FailedOperation.CamAuthFailed	CAM authentication failed.
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
FailedOperation.FlowCreateError	Failed to create a task. Please try again later. If the problem persists, please contact customer service.
FailedOperation.ROGroupMasterInstanceNotRight	The primary instance information of the RO group is not matched.
FailedOperation.ROGroupNotFoundError	The RO group does not exist.
FailedOperation.ROInstanceHasInROGroupError	This read-only replica already belongs to another RO group.
InstanceNotExist	The current instance does not exist.
InternalError.DBError	Backend database execution error.
InternalError.InternalHttpServerError	An exception occurred while executing the request.
InternalError.SystemError	System error. When this error occurs, please contact

	customer service for assistance.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
InvalidParameterValue.InvalidReadOnlyGroupStatus	RO group in incorrect status
InvalidParameterValue.ParameterHandleError	Failed to process the parameter. Please check if the parameter value is valid.
InvalidParameterValue.ReadOnlyGroupNotExist	The RO group does not exist.
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.InstanceStatusLimitOpError	This operation cannot be performed on an instance in this status.
OperationDenied.ROGroupStatusError	This operation cannot be performed on an RO group in this status.
OperationDenied.ROInstanceStatusLimitOpError	This operation cannot be performed on a read-only instance in this status.
OperationDenied.RoInstanceCountExeedError	The total number of read-only nodes should not exceed the upper limit.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.
ResourceUnavailable.InvalidInstanceStatus	Incorrect instance status.

# RemoveDBInstanceFromReadOnlyGroup

最近更新时间：2023-10-13 09:42:46

## 1. API Description

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

This API is used to remove a read-only replica from an RO group.

A maximum of 100 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: RemoveDBInstanceFromReadOnlyGroup.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceid	Yes	String	Instance ID
ReadOnlyGroupid	Yes	String	RO group ID

## 3. Output Parameters

Parameter Name	Type	Description
----------------	------	-------------

FlowId	Integer	Task ID
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Removing read-only instance from RO group

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: RemoveDBInstanceFromReadOnlyGroup
<Common request parameters>

{
  "ReadOnlyGroupId": "\"pgrogrp-k95qzetn\"",
  "DBInstanceId": "\"pgro-k95qzetn\""
}
```

#### Output Example

```
{
  "Response": {
    "RequestId": "d43b2a9f-070c-480b-a0bb-7c210428cfe8",
    "FlowId": 912
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)

- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
FailedOperation.CamAuthFailed	CAM authentication failed.
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
FailedOperation.FlowCreateError	Failed to create a task. Please try again later. If the problem persists, please contact customer service.
FailedOperation.IllegalROInstanceNum	Invalid number of read-only replicas.
FailedOperation.ROGroupMasterInstanceNotRight	The primary instance information of the RO group is not matched.
FailedOperation.ROGroupNotFoundError	The RO group does not exist.
InstanceNotExist	The current instance does not exist.
InternalServerError.InternalHttpServerError	An exception occurred while executing the request.
InternalServerError.SystemError	System error. When this error occurs, please contact customer service for assistance.
InvalidInstanceStatus	Incorrect instance status.

InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
InvalidParameterValue.InvalidReadOnlyGroupStatus	RO group in incorrect status
InvalidParameterValue.ParameterHandleError	Failed to process the parameter. Please check if the parameter value is valid.
InvalidParameterValue.ReadOnlyGroupNotExist	The RO group does not exist.
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.ROGroupStatusError	This operation cannot be performed on an RO group in this status.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.
ResourceUnavailable.InvalidInstanceStatus	Incorrect instance status.

# RebalanceReadOnlyGroup

最近更新时间：2023-10-13 09:42:46

## 1. API Description

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

This API is used to rebalance the loads of read-only replicas in an RO group. Please note that connections to those read-only replicas will be interrupted transiently; therefore, you should ensure that your application can reconnect to the databases. This operation should be performed with caution.

A maximum of 100 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: RebalanceReadOnlyGroup.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
ReadOnlyGroupId	Yes	String	RO group ID

## 3. Output Parameters

Parameter Name	Type	Description
----------------	------	-------------

RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.
-----------	--------	--

## 4. Example

### Example1 Rebalancing the traffic load of read-only instances in RO group

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: RebalanceReadOnlyGroup
<Common request parameters>

{
  "ReadOnlyGroupId": "\"pgrogrp-e0t fm161\""
```

#### Output Example

```
{
  "Response": {
    "RequestId": "d43b2a9f-070c-480b-a0bb-7c210428cfe8"
  }
}
```

## 5. Developer Resources

### SDK

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- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)



- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
FailedOperation.BaseNetworkAccessError	Failed to access classic network. Please try again later. If the problem persists, please contact customer service.
FailedOperation.CamAuthFailed	CAM authentication failed.
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DeleteAllRoute	Failed to delete VPC routes.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
FailedOperation.ROGroupNotFoundError	The RO group does not exist.
FailedOperation.VPCResetServiceError	Failed to configure the VPC.
FailedOperation.VPCUpdateRouteError	Failed to update VPC routes.
InterfaceNameNotFound	<code>ACTION</code> input error.
InternalError.InternalHttpServerError	An exception occurred while executing the request.
InternalError.SystemError	System error. When this error occurs, please contact customer service for assistance.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
InvalidParameterValue.ParameterHandleError	Failed to process the parameter. Please check if the parameter value is valid.

OperationDenied.CamDeniedError	This operation cannot be performed.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.
VpcError	VPC error

# Backup and Restoration APIs

## DescribeBackupDownloadRestriction

最近更新时间：2023-10-13 09:42:59

### 1. API Description

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

This API is used to query the backup download restrictions.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

### 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeBackupDownloadRestriction.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.

### 3. Output Parameters

Parameter Name	Type	Description
RestrictionType	String	Type of the network restrictions for downloading a backup file. Valid values: <code>NONE</code> (backups can be downloaded over both private and public

		networks), <code>INTRANET</code> (backups can only be downloaded over the private network), <code>CUSTOMIZE</code> (backups can be downloaded over specified VPCs or at specified IPs).
VpcRestrictionEffect	String	Whether VPC is allowed. Valid values: <code>ALLOW</code> (allow), <code>DENY</code> (deny). Note: This field may return null, indicating that no valid values can be obtained.
VpcIdSet	Array of String	Whether it is allowed to download the VPC ID list of the backup files. Note: This field may return null, indicating that no valid values can be obtained.
IpRestrictionEffect	String	Whether IP is allowed. Valid values: <code>ALLOW</code> (allow), <code>DENY</code> (deny). Note: Note: This field may return null, indicating that no valid values can be obtained.
IpSet	Array of String	Whether it is allowed to download the IP list of the backup files. Note: This field may return null, indicating that no valid values can be obtained.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Querying the backup download restrictions

This example shows you how to query the backup download restrictions.

#### Input Example

```
POST / HTTP/1.1Host: postgres.tencentcloudapi.comContent-Type: application/jsonX-TC-Action: DescribeBackupDownloadRestriction<common request parameters>{}
```

#### Output Example

```
{
  "Response": {
    "RestrictionType": "Customize",
    "VpcRestrictionEffect": "Allow",
    "VpcIdSet": [
      "vpc-151d6dhr"
    ],
    "IpRestrictionEffect": ""
  }
}
```

```
"IpSet": [],
"RequestId": "be3bafde-f34e-4fda-9f40-04c5515e2148"
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
OperationDenied.CamDeniedError	This operation cannot be performed.

# ModifyBackupDownloadRestriction

最近更新时间：2023-10-13 09:42:57

## 1. API Description

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

This API is used to modify the backup download restrictions.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: ModifyBackupDownloadRestriction.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
RestrictionType	Yes	String	Type of the network restrictions for downloading a backup file. Valid values: <code>NONE</code> (backups can be downloaded over both private and public networks), <code>INTRANET</code> (backups can only be downloaded over the private network), <code>CUSTOMIZE</code> (backups can be downloaded over specified VPCs or at specified IPs).
VpcRestrictionEffect	No	String	Whether VPC is allowed. Valid values: <code>ALLOW</code> (allow), <code>DENY</code> (deny).
VpcIdSet.N	No	Array of	Whether it is allowed to download the VPC ID list of the backup files.

		String	
IpRestrictionEffect	No	String	Whether IP is allowed. Valid values: <code>ALLOW</code> (allow), <code>DENY</code> (deny).
IpSet.N	No	Array of String	Whether it is allowed to download the IP list of the backup files.

### 3. Output Parameters

Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Modifying the backup download restrictions

This example shows you how to modify the backup download restrictions.

#### Input Example

```
POST / HTTP/1.1Host: postgres.tencentcloudapi.comContent-Type: application/jsonX-TC-Action: ModifyBackupDownloadRestriction<common request parameters>{ "RestrictionType": "CUSTOMIZE", "VpcRestrictionEffect": "ALLOW", "VpcIdSet": [ "vpc-15ld6dhr" ], "IpRestrictionEffect": "", "IpSet": []}
```

#### Output Example

```
{
  "Response": {
    "RequestId": "be3bafde-f34e-4fda-9f40-04c5515e2148"
  }
}
```

### 5. Developer Resources

## SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

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- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
FailedOperation.DatabaseAffectedError	Data operation failed. Please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
InvalidParameter.ParameterCheckError	Failed to check the parameter.
InvalidParameter.VpcNotFoundError	Failed to query VPC information.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
OperationDenied.CamDeniedError	This operation cannot be performed.



# DescribeDBXlogs

最近更新时间：2023-10-13 09:42:57

## 1. API Description

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

This API is used to get the instance Xlog list. This API is disused and replaced by the [DescribeBaseBackups](#) API.

A maximum of 1000 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeDBXlogs.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceid	Yes	String	Instance ID in the format of postgres-4wdeb0zv.
StartTime	Yes	Timestamp	Query start time in the format of 2018-06-10 17:06:38, which cannot be more than 7 days ago
EndTime	Yes	Timestamp	Query end time in the format of 2018-06-10 17:06:38
Offset	No	Integer	Page number for data return in paged query. Pagination starts from 0
Limit	No	Integer	Number of entries returned per page in paged query. Value range: 1-100.

### 3. Output Parameters

Parameter Name	Type	Description
TotalCount	Integer	Number of date entries returned this time.
XlogList	Array of <a href="#">Xlog</a>	Xlog list
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Getting the Xlog list of the instance "postgres-apzvwncr"

u200cu200cu200cu200cu200cu200cThis example shows you how to query the full backup list of the database instance "postgres-6fego161" from 2018-06-10 17:06:38 to 2018-06-11 17:06:38.

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeDBXlogs
<Common request parameters>

{
  "EndTime": "2018-06-11 17:06:38",
  "DBInstanceId": "postgres-apzvwncr",
  "StartTime": "2018-06-10 17:06:38"
}
```

#### Output Example

```
{
  "Response": {
    "TotalCount": 6,
    "XlogList": [
      {
        "StartTime": "2018-06-22 01:56:46",
        "InternalAddr": "http://172.16.16.30:8366/download/20180622015646_20180622015653."
      }
    ]
  }
}
```

```
tar.gz?giz7Z4LlMjal0S0oJY6+5JbQ1MfhjybTALKlriBmLUrmJMxzi1C3EagZ/IhOQeSGyXm+Qr3D3I
2GL1G4RV69vLVylUaeIJ+zH+CEG5Ast0GoDmpzjJ5Jaw==",
"EndTime": "2018-06-22 01:56:53",
"ExternalAddr": "https://gz-dl-postgres.cloud.tencent.com/download/20180622015646
_20180622015653.tar.gz?giz7Z4LlMjal0S0oJY6+5JbQ1MfhjybTALKlriBmLUrmJMxzi1C3EagZ/I
hOQeSGyXm+Qr3D3I2GL1G4RV69vLVylUaeIJ+zH+CEG5Ast0GoDmpzjJ5Jaw==",
"Id": 450,
"Size": 247967
},
{
"StartTime": "2018-06-22 01:56:17",
"InternalAddr": "http://172.16.16.30:8366/download/20180622015617_20180622015645.
tar.gz?giz7Z4LlMjal0S0oJY6+5JbQ1MfhjybTALKlriBmLUrmJMxzi1C3Eamxg5sq4mNUSXLgasiI8P
5xiJVUBOrLUPKLYacTxFWP8y56/f36byxdYH5+PGMzOA==",
"EndTime": "2018-06-22 01:56:45",
"ExternalAddr": "https://gz-dl-postgres.cloud.tencent.com/download/20180622015617
_20180622015645.tar.gz?giz7Z4LlMjal0S0oJY6+5JbQ1MfhjybTALKlriBmLUrmJMxzi1C3Eamxg5
sq4mNUSXLgasiI8P5xiJVUBOrLUPKLYacTxFWP8y56/f36byxdYH5+PGMzOA==",
"Id": 450,
"Size": 899618
},
{
"StartTime": "2018-06-22 01:56:10",
"InternalAddr": "http://172.16.16.30:8366/download/20180622015610_20180622015610.
tar.gz?giz7Z4LlMjal0S0oJY6+5JbQ1MfhjybTALKlriBmLUrmJMxzi1C3EWUN67hkmzziI32w2wS4KNi
5jqNoaHxSJ59WJ9lrYebaz9SZgdOXyUBxlFmOGNchE3Q==",
"EndTime": "2018-06-22 01:56:10",
"ExternalAddr": "https://gz-dl-postgres.cloud.tencent.com/download/20180622015610
_20180622015610.tar.gz?giz7Z4LlMjal0S0oJY6+5JbQ1MfhjybTALKlriBmLUrmJMxzi1C3EWUN67
hkmzziI32w2wS4KNi5jqNoaHxSJ59WJ9lrYebaz9SZgdOXyUBxlFmOGNchE3Q==",
"Id": 450,
"Size": 41749
},
{
"StartTime": "2018-06-21 01:55:49",
"InternalAddr": "http://172.16.16.30:8366/download/20180621015549_20180621015557.
tar.gz?giz7Z4LlMjal0S0oJY6+5JbQ1MfhjybTGXfsNyKOxst2LTlcd0/LLPjSmz1BP/DJbQOeznMtdJ
sr7714alcITO6f+jyIZ0upCYIFZhCIO2iJSzDXktIsGg==",
"EndTime": "2018-06-21 01:55:57",
"ExternalAddr": "https://gz-dl-postgres.cloud.tencent.com/download/20180621015549
_20180621015557.tar.gz?giz7Z4LlMjal0S0oJY6+5JbQ1MfhjybTGXfsNyKOxst2LTlcd0/LLPjSmz
1BP/DJbQOeznMtdJsr7714alcITO6f+jyIZ0upCYIFZhCIO2iJSzDXktIsGg==",
"Id": 450,
"Size": 247941
},
{
"StartTime": "2018-06-21 01:55:20",
```

```
"InternalAddr": "http://172.16.16.30:8366/download/20180621015520_20180621015548.tar.gz?giz7Z4LlMjal0S0oJY6+5JbQ1MfhjybTGXfsNyKOxst2LTlcd0/LLNhflPY0y78Bi9G0LEDTC70hI3QKhTP7jWZT/+e51oyIRW6hm8MoEKQ2DyBqjqvtaQ==",
"EndTime": "2018-06-21 01:55:48",
"ExternalAddr": "https://gz-dl-postgres.cloud.tencent.com/download/20180621015520_20180621015548.tar.gz?giz7Z4LlMjal0S0oJY6+5JbQ1MfhjybTGXfsNyKOxst2LTlcd0/LLNhflPY0y78Bi9G0LEDTC70hI3QKhTP7jWZT/+e51oyIRW6hm8MoEKQ2DyBqjqvtaQ==",
"Id": 450,
"Size": 899646
},
{
"StartTime": "2018-06-21 01:55:13",
"InternalAddr": "http://172.16.16.30:8366/download/20180621015513_20180621015513.tar.gz?giz7Z4LlMjal0S0oJY6+5JbQ1MfhjybTGXfsNyKOxst2LTlcd0/LLKcr1q+wVdmFDDcdUtRcVsPlqfMXXg63tRWRtX/jFz6/MNbKg3r+EDkD5NdLA4nWhw==",
"EndTime": "2018-06-21 01:55:13",
"ExternalAddr": "https://gz-dl-postgres.cloud.tencent.com/download/20180621015513_20180621015513.tar.gz?giz7Z4LlMjal0S0oJY6+5JbQ1MfhjybTGXfsNyKOxst2LTlcd0/LLKcr1q+wVdmFDDcdUtRcVsPlqfMXXg63tRWRtX/jFz6/MNbKg3r+EDkD5NdLA4nWhw==",
"Id": 450,
"Size": 41744
}
],
"RequestId": "08fdf411-5d39-44f2-8e1d-a58ee60b237d"
}
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
AuthFailure.UnauthorizedOperation	Authentication failed.
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
FailedOperation.OssAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.OssOperationFailed	Failed to request the backend API.
FailedOperation.PresignedURLGetError	An error occurred while getting the pre-signed authorization URL.
FailedOperation.StorePathSplitError	Incorrect storage path format
InternalError.DBError	Backend database execution error.
InternalError.InstanceDataError	Failed to access database management service. Please contact customer service.
InternalError.InternalHttpServerError	An exception occurred while executing the request.
InternalError.SystemError	System error. When this error occurs, please contact customer service for assistance.
InvalidParameter	Parameter error.
InvalidParameterValue.IllegalRegion	Invalid <code>Region</code> parameter.
InvalidParameterValue.InstanceNotExist	The current instance does not exist.

InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
InvalidParameterValue.ParameterHandleError	Failed to process the parameter. Please check if the parameter value is valid.
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.InstanceAccessDeniedError	You do not have the permission to operate this resource.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.
UnknownError	Unknown error. When this error occurs, please contact customer service for assistance.

# DescribeDBBackups

最近更新时间：2023-10-13 09:42:57

## 1. API Description

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

This API is used to query the backup list of an instance. This API is disused and replaced by the [DescribeBaseBackups](#) API.

A maximum of 1000 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeDBBackups.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceId	Yes	String	Instance ID in the format of postgres-4wdeb0zv.
Type	Yes	Integer	Backup mode (1: full). Currently, only full backup is supported. The value is 1.
StartTime	Yes	Timestamp	Query start time in the format of 2018-06-10 17:06:38, which cannot be more than 7 days ago
EndTime	Yes	Timestamp	Query end time in the format of 2018-06-10 17:06:38

Limit	No	Integer	Number of entries to be returned per page for backup list. Default value: 20. Minimum value: 1. Maximum value: 100. (If this parameter is left empty or 0, the default value will be used)
Offset	No	Integer	Page number for data return in paged query. Pagination starts from 0. Default value: 0.

### 3. Output Parameters

Parameter Name	Type	Description
TotalCount	Integer	Number of backup files in the returned backup list
BackupList	Array of <a href="#">DBBackup</a>	Backup list
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Querying the list of backups for the instance "postgres-6fego161"

u200cu200cu200cu200cu200cu200cThis example shows you how to query the full backup list of the database instance "postgres-6fego161" from 2018-06-10 17:06:38 to 2018-06-11 17:06:38.

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeDBBackups
<Common request parameters>

{
  "DBInstanceId": "postgres-6fego161",
  "Limit": "20",
  "StartTime": "2018-06-10 17:06:38",
  "Offset": "0",
  "EndTime": "2018-06-11 17:06:38",
```



```
"Type": "1"
}
```

## Output Example

```
{
  "Response": {
    "TotalCount": 2,
    "BackupList": [
      {
        "SetId": "f77ecd1a-087c-5c66-8c35-95c835d7ec24",
        "Status": 2,
        "InternalAddr": "http://172.16.16.30:8366/download/20180622015612.tar.gz?giz7Z4LlMjascFkshSSB4+B1gaIOF3HAQIZcFPDbIsdfgfJdfs+89qfhuYQ5wC0ooTcDIdUwB4iJlL1by8xfKkcMAv8nr8g67P6hhg5YOnk=",
        "StartTime": "2018-06-22 01:56:01.181971",
        "ExternalAddr": "https://gz-dl-postgres.cloud.tencent.com/download/20180622015612.tar.gz?giz7Z4LlMjascFkshSSB4+B1gaIOF3HAQIZcFPDbIsdfgfJdfs+89qfhuYQ5wC0ooTcDIdUwB4iJlL1by8xfKkcMAv8nr8g67P6hhg5YOnk=",
        "Strategy": 1,
        "DbList": [
          "db1"
        ],
        "Way": 1,
        "EndTime": "2018-06-22 01:56:55.071181",
        "Type": 1,
        "Id": 450,
        "Size": 3654968
      },
      {
        "SetId": "f6yec1a-087c-5c66-cdas-95c835d7ec24",
        "Status": 2,
        "InternalAddr": "http://172.16.16.30:8366/download/20180621015515.tar.gz?giz7Z4LlMjascFkshSSB4+B1gaIOF3HAQIZcFPDbIse2MDEI7vd/CuyMUMMyDXAd4ld69sCMdEKwkpFWIVcfE+PZ0+MYTbsBHw84KtSGw8=",
        "StartTime": "2018-06-21 01:55:04.199169",
        "ExternalAddr": "https://gz-dl-postgres.cloud.tencent.com/download/20180621015515.tar.gz?giz7Z4LlMjascFkshSSB4+B1gaIOF3HAQIZcFPDbIse2MDEI7vd/CuyMUMMyDXAd4ld69sCMdEKwkpFWIVcfE+PZ0+MYTbsBHw84KtSGw8=",
        "Strategy": 1,
        "DbList": [
          "db2"
        ],
        "Way": 1,
        "EndTime": "2018-06-21 01:55:58.477232",
        "Type": 1,

```

```
"Id": 450,
"Size": 3654991
},
"RequestId": "08fdf411-5d39-44f2-8e1d-a58ee60b237d"
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

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- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
AuthFailure.UnauthorizedOperation	Authentication failed.
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact

	customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
FailedOperation.OssAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.OssOperationFailed	Failed to request the backend API.
FailedOperation.PresignedURLGetError	An error occurred while getting the pre-signed authorization URL.
FailedOperation.StorePathSplitError	Incorrect storage path format
InternalError.DBError	Backend database execution error.
InternalError.InstanceDataError	Failed to access database management service. Please contact customer service.
InternalError.InternalHttpServerError	An exception occurred while executing the request.
InternalError.SystemError	System error. When this error occurs, please contact customer service for assistance.
InvalidParameterValue.IllegalRegion	Invalid <code>Region</code> parameter.
InvalidParameterValue.InstanceNotExist	The current instance does not exist.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
InvalidParameterValue.ParameterHandleError	Failed to process the parameter. Please check if the parameter value is valid.
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.InstanceAccessDeniedError	You do not have the permission to operate this resource.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.
UnknownError	Unknown error. When this error occurs, please contact customer service for assistance.
UnsupportedOperation	The operation is not supported.

# ModifyBackupPlan

最近更新时间：2023-10-13 09:42:56

## 1. API Description

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

This API is used to modify the backup plan of an instance, such as modifying the backup start time. By default, a full backup starts at midnight every day and the generated backup files will be retained for seven days.

A maximum of 100 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: ModifyBackupPlan.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceId	Yes	String	Instance ID
MinBackupStartTime	No	String	The earliest time to start a backup
MaxBackupStartTime	No	String	The latest time to start a backup
BaseBackupRetentionPeriod	No	Integer	Backup retention period in days. Value range: 7-1830
BackupPeriod.N	No	Array	Backup cycle, which means on which days each week

		of String	the instance will be backed up. The parameter value should be the lowercase names of the days of the week.
--	--	-----------	--

### 3. Output Parameters

Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Modifying the backup plan of an instance

This example shows you how to modify the backup plan of the instance "postgres-xxxxxxx". According to the new backup plan, the instance will be backed up during 01:00:00–02:00:00 AM and the backup files will be retained for 7 days.

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: ModifyBackupPlan
<Common request parameters>

{
  "BackupPeriod": [
    "tuesday",
    "monday"
  ],
  "BaseBackupRetentionPeriod": "7",
  "DBInstanceId": "postgres-xxxxxxx",
  "MinBackupStartTime": "01:00:00",
  "MaxBackupStartTime": "02:00:00"
}
```

#### Output Example

```
{
  "Response": {
    "RequestId": "8a61e500-aa33-454c-9ec2-da2a368c39ab"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.

InternalError.InternalServerError	An exception occurred while executing the request.
InvalidParameter.ParameterCheckError	Failed to check the parameter.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.InstanceStatusLimitOpError	This operation cannot be performed on an instance in this status.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.

# DescribeCloneDBInstanceSpec

最近更新时间：2023-10-13 09:42:57

## 1. API Description

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

This API is used to query the minimum specification required by a cloned instance, including `SpecCode` and disk specification.

A maximum of 1000 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeCloneDBInstanceSpec.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceid	Yes	String	Instance ID.
BackupSetId	No	String	Basic backup set ID. Either this parameter or <code>RecoveryTargetTime</code> must be passed in. If both are passed in, only this parameter takes effect.
RecoveryTargetTime	No	String	Restoration time (UTC+8). Either this parameter or <code>BackupSetId</code> must be passed in.



### 3. Output Parameters

Parameter Name	Type	Description
MinSpecCode	String	Code of the minimum specification available for purchase.
MinStorage	Integer	The minimum disk capacity in GB available for purchase.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Querying the minimum specification for cloning the instance "postgres-apzvwncr"

u200cu200cu200cu200cu200cThis example shows you how to query the minimum specification for cloning the instance "postgres-apzvwncr".

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeCloneDBInstanceSpec
<Common request parameters>

{
  "RecoveryTargetTime": "2021-12-24 03:41:50",
  "DBInstanceId": "postgres-apzvwncr"
}
```

#### Output Example

```
{
  "Response": {
    "RequestId": "08fdf411-5d39-44f2-8e1d-a58ee60b237d",
    "MinSpecCode": "cdb.pg.sh1.2g",
    "MinStorage": 10
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

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- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
FailedOperation.CamCheckResourceError	Failed to get permissions. Please try again later. If the problem persists, please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
FailedOperation.QuerySpecError	Failed to query specifications. Please try again later. If the problem persists, please contact customer service.
InternalServerError.InternalHttpServerError	An exception occurred while executing the request.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.InstanceAccessDeniedError	You do not have the permission to operate this resource.
OperationDenied.InstanceStatusLimitOpError	This operation cannot be performed on an instance in this status.

---

ResourceNotFound.InstanceNotFoundError	The instance does not exist.
--	------------------------------

# DescribeBackupPlans

最近更新时间：2023-10-13 09:42:58

## 1. API Description

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

This API is used to query all backup plans of an instance.

A maximum of 1000 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeBackupPlans.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceId	Yes	String	Instance ID

## 3. Output Parameters

Parameter Name	Type	Description
Plans	Array of	The set of instance backup plans

	BackupPlan	
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Querying all backup plans of instance

This example shows you how to query all backup plans of instance "postgres-xxxxxxx".

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeBackupPlans
<Common request parameters>

{
  "DBInstanceId": "postgres-xxxxxxx"
}
```

#### Output Example

```
{
  "Response": {
    "Plans": [
      {
        "BackupPeriod": "[\"monday\", \"thursday\", \"friday\"]",
        "BaseBackupRetentionPeriod": 3,
        "MaxBackupStartTime": "10:00:00",
        "MinBackupStartTime": "08:00:00"
      }
    ],
    "RequestId": ""
  }
}
```

## 5. Developer Resources

### SDK

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- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
FailedOperation.CamCheckResourceError	Failed to get permissions. Please try again later. If the problem persists, please contact customer service.
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
InternalError.InternalHttpServerError	An exception occurred while executing the request.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.InstanceAccessDeniedError	You do not have the permission to operate this resource.
OperationDenied.InstanceStatusLimitOpError	This operation cannot be performed on an instance in this status.

ResourceNotFound.InstanceNotFoundError	The instance does not exist.
--	------------------------------

# DescribeAvailableRecoveryTime

最近更新时间：2023-10-13 09:42:59

## 1. API Description

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

This API is used to query the available restoration time of an instance.

A maximum of 1000 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeAvailableRecoveryTime.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceId	Yes	String	Instance ID

## 3. Output Parameters

Parameter Name	Type	Description
RecoveryBeginTime	String	The earliest restoration time (UTC+8).



RecoveryEndTime	String	The latest restoration time (UTC+8).
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Querying the available restoration time of instance

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeAvailableRecoveryTime
<Common request parameters>

{
  "DBInstanceId": "postgres-apzvwncr"
}
```

#### Output Example

```
{
  "Response": {
    "RequestId": "08fdf411-5d39-44f2-8e1d-a58ee60b237d",
    "RecoveryBeginTime": "2021-12-24 03:41:50",
    "RecoveryEndTime": "2021-12-25 17:43:27"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)

- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
FailedOperation.CamCheckResourceError	Failed to get permissions. Please try again later. If the problem persists, please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
InternalServerError.InternalHttpServerError	An exception occurred while executing the request.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.InstanceAccessDeniedError	You do not have the permission to operate this resource.
OperationDenied.InstanceStatusLimitOpError	This operation cannot be performed on an instance in this status.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.

# CloneDBInstance

最近更新时间：2023-12-11 16:33:19

## 1. API Description

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

This API is used to clone an instance by specifying a backup set or a point in time.

A maximum of 100 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: CloneDBInstance.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceid	Yes	String	ID of the original instance to be cloned.
SpecCode	Yes	String	Purchasable code, which can be obtained from the <code>SpecCode</code> field in the return value of the <a href="#">DescribeClasses</a> API.
Storage	Yes	Integer	Instance storage capacity in GB.

Parameter Name	Required	Type	Description
Period	Yes	Integer	Validity period in months. Valid values: <ul style="list-style-type: none"> <li>Monthly subscription: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 24, 36.</li> <li>Pay-as-you-go: 1.</li> </ul>
AutoRenewFlag	Yes	Integer	Auto-renewal flag. Valid values: <ul style="list-style-type: none"> <li>0 : Manual renewal.</li> <li>1 : Automatic renewal.</li> </ul> Default value: 0.
VpcId	Yes	String	VPC ID in the format of <code>vpc-xxxxxxx</code> , which can be obtained in the console or from the <code>unVpcId</code> field in the return value of the DescribeVpcEx API.
SubnetId	Yes	String	VPC subnet ID in the format of <code>subnet-xxxxxxxx</code> , which can be obtained in the console or from the <code>unSubnetId</code> field in the return value of the <a href="#">DescribeSubnets</a> API.
Name	No	String	Name of the newly purchased instance, which can contain up to 60 letters, digits, or symbols (-_). If this parameter is not specified, "Unnamed" will be displayed by default.
InstanceChargeType	No	String	Instance billing mode. Valid values: <ul style="list-style-type: none"> <li><code>PREPAID</code> : Monthly subscription.</li> <li><code>POSTPAID_BY_HOUR</code> : Pay-as-you-go.</li> </ul> Default value: <code>PREPAID</code> .
SecurityGroupIds.N	No	Array of String	Security group of the instance, which can be obtained from the <code>sgId</code> field in the return value of the <a href="#">DescribeSecurityGroups</a> API. If this parameter is not specified, the default security group will be bound.
ProjectId	No	Integer	Project ID.
TagList.N	No	Array of <a href="#">Tag</a>	The information of tags to be bound with the instance, which is left empty by default. This parameter can be obtained from the <code>Tags</code> field in the return value of the <a href="#">DescribeTags</a> API.

Parameter Name	Required	Type	Description
DBNodeSet.N	No	Array of <a href="#">DBNode</a>	Deployment information of the instance node, which will display the information of each AZ when the instance node is deployed across multiple AZs. The information of AZ can be obtained from the <code>Zone</code> field in the return value of the <a href="#">DescribeZones</a> API.
AutoVoucher	No	Integer	Whether to use vouchers automatically. Valid values: <ul style="list-style-type: none"> <li><code>0</code> : No.</li> <li><code>1</code> : Yes.</li> </ul> Default value: <code>0</code> .
VoucherIds	No	String	Voucher ID list.
ActivityId	No	Integer	Campaign ID.
BackupSetId	No	String	Basic backup set ID.
RecoveryTargetTime	No	String	Restoration point in time.
SyncMode	No	String	Primary-standby sync mode. Valid values: <ul style="list-style-type: none"> <li><code>Semi-sync</code></li> <li><code>Async</code></li> </ul> Default value for the primary instance: <code>Semi-sync</code> . Default value for the standby instance: <code>Async</code> .

### 3. Output Parameters

Parameter Name	Type	Description
DealName	String	Order ID. Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
BillId	String	Bill ID. Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
DBInstanceId	String	ID of the cloned instance, which will be returned only when the instance is pay-as-you-go. Note: This field may return <code>null</code> , indicating that no valid values can be obtained.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Cloning u200dan instance

This example shows you how to use the clone instance to restore data when it is deleted from the original instance by mistake.

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: CloneDBInstance
<Common request parameters>

{
  "VpcId": "vpc-2ot3acw1",
  "AutoRenewFlag": "1",
  "DBInstanceId": "postgres-abcd1234",
  "RecoveryTargetTime": "2021-12-25 01:27:35",
  "Storage": "10",
  "Period": "1",
  "AutoVoucher": "0",
  "InstanceChargeType": "prepaid",
  "SpecCode": "cdb.pg.z1.2g",
  "SubnetId": "subnet-ppv9iw34",
  "DBNodeSet": [
    {
      "Role": "Standby",
      "Zone": "ap-guangzhou-3"
    },
    {
      "Role": "Primary",
      "Zone": "ap-guangzhou-3"
    }
  ]
}
```

#### Output Example

```
{
  "Response": {
    "RequestId": "6ace8140-6b9e-4e81-a8ad-ef3f92b2aa90",
    "DealName": "20211225711000768276461",
    "BillId": "20211225711000768276471",
  }
}
```

```
"DBInstanceId": "postgres-xxxx"  
}  
}
```

## 5. Developer Resources

### SDK

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- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
AuthFailure.UnauthorizedOperation	Authentication failed.
FailedOperation.AllocateQuotasError	Failed to request a quota for resource tags.
FailedOperation.CamAuthFailed	CAM authentication failed.
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.CdbCgwConnectError	Failed to get project information. Please try again later. If the problem persists, please contact customer service.

Error Code	Description
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
FailedOperation.GetSubnetError	Failed to query VPC subnets.
FailedOperation.GetVpcInfoError	Failed to query VPC information. Please try again later. If the problem persists, please contact customer service.
FailedOperation.QuerySpecError	Failed to query specifications. Please try again later. If the problem persists, please contact customer service.
FailedOperation.QueryVpcFailed	Failed to query VPC.
FailedOperation.QueryVpcFalied	Failed to get VPC details.
InternalServerError.InternalHttpServerError	An exception occurred while executing the request.
InvalidParameter.ParameterCheckError	Failed to check the parameter.
InvalidParameterValue.IllegalProjectId	Invalid <code>ProjectId</code> .
InvalidParameterValue.IllegalRegion	Invalid <code>Region</code> parameter.
InvalidParameterValue.IllegalZone	Invalid <code>Zone</code> parameter.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
InvalidParameterValue.InvalidZoneldError	Invalid availability zone.
InvalidParameterValue.SpecNotRecognizedError	Failed to identify the specification ({{1}}).
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.InstanceStatusLimitError	This operation cannot be performed on an instance in this status.



# ModifyBaseBackupExpireTime

最近更新时间：2023-10-13 09:42:56

## 1. API Description

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

This API is used to modify the specified expiration time of a full backup for an instance.

A maximum of 100 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: ModifyBaseBackupExpireTime.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceId	Yes	String	Instance ID
BaseBackupId	Yes	String	Base backup ID
NewExpireTime	Yes	String	New expiration time

## 3. Output Parameters

--	--	--

Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Modifying the expiration time of a full backup

This example shows you how to modify the expiration time to "2023-02-18 23:59:59" for the full backup set "88d3a71e-b822-5728-9d41-d8cfc0d0556e" under the instance "postgres-9n26zs6n".

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: ModifyBaseBackupExpireTime
<Common request parameters>

{
  "BaseBackupId": "88d3a71e-b822-5728-9d41-d8cfc0d0556e",
  "DBInstanceId": "postgres-9n26zs6n",
  "NewExpireTime": "2023-02-18 23:59:59"
}
```

#### Output Example

```
{
  "Response": {
    "RequestId": "be3bafde-f34e-4fda-9f40-04c5515e2148"
  }
}
```

## 5. Developer Resources

### SDK

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- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
FailedOperation.FailedOperationError	Operation failed. Please try again later.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
ResourceNotFound.InstanceNotFoundError	The instance does not exist.

# DescribeLogBackups

最近更新时间：2023-10-13 09:42:57

## 1. API Description

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

This API is used to query the list of log backups.

A maximum of 1000 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeLogBackups.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
MinFinishTime	No	String	Minimum end time of a backup in the format of <code>2018-01-01 00:00:00</code> . It is 7 days ago by default.
MaxFinishTime	No	String	Maximum end time of a backup in the format of <code>2018-01-01 00:00:00</code> . It is the current time by default.
Filters.N	No	Array of <a href="#">Filter</a>	Filter instances using one or more criteria. Valid filter names: db-instance-id: Filter by instance ID (in string format). db-instance-name: Filter by instance name (in string format). db-instance-ip: Filter by instance VPC IP (in string format).

Limit	No	Integer	The maximum number of results returned per page. Value range: 1-100. Default: <code>10</code> .
Offset	No	Integer	Data offset, which starts from 0.
OrderBy	No	String	Sorting field. Valid values: <code>StartTime</code> , <code>FinishTime</code> , <code>Size</code> .
OrderByType	No	String	Sorting order. Valid values: <code>asc</code> (ascending), <code>desc</code> (descending).

### 3. Output Parameters

Parameter Name	Type	Description
TotalCount	Integer	Number of queried log backups
LogBackupSet	Array of <a href="#">LogBackup</a>	List of log backup details
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Querying the list of log backups

u200cu200cu200cu200cu200cu200cu200cu200cThis example shows you how to query the latest record of the log backup.

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeLogBackups
<Common request parameters>

{
  "Limit": 1,
  "Offset": 0,
```

```
"OrderBy": "FinishTime",
"OrderByType": "desc"
}
```

## Output Example

```
{
  "Response": {
    "LogBackupSet": [
      {
        "BackupMethod": "physical",
        "BackupMode": "automatic",
        "DBInstanceId": "postgres-jdlmoll19",
        "ExpireTime": "2023-02-22 21:10:52",
        "FinishTime": "2023-02-15 21:10:52",
        "Id": "2628bcde-ce13-554a-b47d-2b15187a02ec",
        "Name": "*****.tar.gz",
        "Size": 16783360,
        "StartTime": "2023-02-15 21:10:52",
        "State": "finished"
      }
    ],
    "RequestId": "c716c175-6037-4bdd-a35b-2c05399489f3",
    "TotalCount": 10
  }
}
```

## 5. Developer Resources

### SDK

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- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
OperationDenied.CamDeniedError	This operation cannot be performed.

# DescribeBaseBackups

最近更新时间：2023-10-13 09:42:58

## 1. API Description

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

This API is used to query the list of full backups.

A maximum of 1000 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeBaseBackups.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
MinFinishTime	No	String	Minimum end time of a backup in the format of <code>2018-01-01 00:00:00</code> . It is 7 days ago by default.
MaxFinishTime	No	String	Maximum end time of a backup in the format of <code>2018-01-01 00:00:00</code> . It is the current time by default.
Filters.N	No	Array of <a href="#">Filter</a>	Filter instances by using one or more filters. Valid values: <code>db-instance-idFilter</code> (filter by instance ID in string), <code>db-instance-name</code> (filter by instance name in string), <code>db-</code>



			<code>instance-ip</code> (filter by instance VPC IP address in string), <code>base-backup-id</code> (filter by backup set ID in string),
Limit	No	Integer	The maximum number of results returned per page. Value range: 1-100. Default: <code>10</code>
Offset	No	Integer	Data offset, which starts from 0.
OrderBy	No	String	Sorting field. Valid values: <code>StartTime</code> , <code>FinishTime</code> , <code>Size</code> .
OrderByType	No	String	Sorting order. Valid values: <code>asc</code> (ascending), <code>desc</code> (descending).

### 3. Output Parameters

Parameter Name	Type	Description
TotalCount	Integer	Number of queried full backups
BaseBackupSet	Array of <a href="#">BaseBackup</a>	List of full backup details
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Querying the list of full backups

This example shows you how to query the latest backup set record.

#### Input Example

```
POST / HTTP/1.1Host: postgres.tencentcloudapi.comContent-Type: application/jsonX-TC-Action: DescribeBaseBackups<common request parameters>{ "Limit": 1, "Offset": 0, "OrderBy": "FinishTime", "OrderByType": "desc"}
```

#### Output Example

```
{
  "Response": {
    "BaseBackupSet": [
      {
        "BackupMethod": "physical",
        "BackupMode": "manual",
        "DBInstanceId": "postgres-9n26zs6n",
        "ExpireTime": "2023-02-18 23:59:59",
        "FinishTime": "2023-02-15 19:09:36",
        "Id": "88d3a71e-b822-5728-9d41-d8cfc0d0556e",
        "Name": "manual-20230215190924.tar.gz",
        "Size": 39845888,
        "StartTime": "2023-02-15 19:09:24",
        "State": "finished"
      }
    ],
    "RequestId": "3f164712-8746-464f-a490-3084a470000e",
    "TotalCount": 10
  }
}
```

## 5. Developer Resources

### SDK

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- [Tencent Cloud SDK 3.0 for Java](#)
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- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
OperationDenied.CamDeniedError	This operation cannot be performed.

# DescribeBackupSummaries

最近更新时间：2023-10-13 09:42:58

## 1. API Description

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

This API is used to query the backup statistics of an instance. It will return the number and size (bytes) of backups of the instance.

A maximum of 1000 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeBackupSummaries.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
Limit	No	Integer	The maximum number of results returned per page. Value range: 1-100. Default: 10
Offset	No	Integer	Data offset, which starts from 0.
Filters.N	No	Array of Filter	Filter instances using one or more criteria. Valid filter names: db-instance-id: Filter by instance ID (in string format). db-instance-name: Filter by instance name (in string format). db-instance-ip: Filter by instance VPC IP (in string format).

OrderBy	No	String	Sorting field. Valid values: <code>TotalBackupSize</code> , <code>LogBackupSize</code> , <code>ManualBaseBackupSize</code> , <code>AutoBaseBackupSize</code> .
OrderByType	No	String	Sorting order. Valid values: <code>asc</code> (ascending), <code>desc</code> (descending).

### 3. Output Parameters

Parameter Name	Type	Description
BackupSummarySet	Array of <a href="#">BackupSummary</a>	Backup statistics list.
TotalCount	Integer	Number of all queried backups.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Querying the backup statistics

##### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeBackupSummaries
<Common request parameters>

{
  "Limit": 20,
  "Offset": 0,
  "OrderByType": "desc"
}
```

##### Output Example

```
{
  "Response": {
```

```
"BackupSummarySet": [
  {
    "AutoBaseBackupCount": 3,
    "AutoBaseBackupSize": 3535342436352,
    "DBInstanceId": "postgres-lsw5y0bp",
    "LogBackupCount": 2,
    "LogBackupSize": 167792640,
    "ManualBaseBackupCount": 1,
    "ManualBaseBackupSize": 1178447478784,
    "TotalBackupCount": 6,
    "TotalBackupSize": 4713957707776
  }
],
"RequestId": "3929dd3a-d95d-4ec2-ae69-a98317ce24fa",
"TotalCount": 10
}
```

## 5. Developer Resources

### SDK

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### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAffectedError	Data operation failed. Please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
OperationDenied.CamDeniedError	This operation cannot be performed.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.

# DescribeBackupOverview

最近更新时间：2023-10-13 09:42:58

## 1. API Description

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

This API is used to query the backup overview. It will return the current number and size of backups, free backup space size, and paid backup space size (all size values are in bytes).

A maximum of 1000 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeBackupOverview.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.

## 3. Output Parameters

Parameter Name	Type	Description
TotalFreeSize	Integer	Total free space size in bytes
UsedFreeSize	Integer	Used free space size in bytes



UsedBillingSize	Integer	Used paid space size in bytes
LogBackupCount	Integer	Number of log backups
LogBackupSize	Integer	Log backup size in bytes
ManualBaseBackupCount	Integer	Number of manually created full backups
ManualBaseBackupSize	Integer	Size of manually created full backups in bytes
AutoBaseBackupCount	Integer	Number of automatically created full backups
AutoBaseBackupSize	Integer	Size of automatically created full backups in bytes
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Querying the backup overview

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeBackupOverview
<Common request parameters>

{}
```

#### Output Example

```
{
  "Response": {
    "AutoBaseBackupCount": 494,
    "AutoBaseBackupSize": 25577154048,
    "LogBackupCount": 4677,
    "LogBackupSize": 89789143040,
    "ManualBaseBackupCount": 20,
    "ManualBaseBackupSize": 1002476032,
    "RequestId": "b4c5f18a-f917-46b4-8689-d4a64e3381fb",
    "TotalFreeSize": 13378823127040,
    "UsedBillingSize": 4329912320,
```

```
"UsedFreeSize": 112038860800
}
```

## 5. Developer Resources

### SDK

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- [Tencent Cloud SDK 3.0 for .NET](#)
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### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
OperationDenied.CamDeniedError	This operation cannot be performed.

# DescribeBackupDownloadURL

最近更新时间：2023-10-13 09:42:58

## 1. API Description

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

This API is used to query the download address of a specified backup set, including full backup sets and incremental log backup sets.

A maximum of 1000 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeBackupDownloadURL.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceId	Yes	String	Instance ID.
BackupType	Yes	String	Backup type. Valid values: <code>LogBackup</code> , <code>BaseBackup</code> .

BackupId	Yes	String	Unique backup ID.
URLExpireTime	No	Integer	Validity period of a URL, which is 12 hours by default.
BackupDownloadRestriction	No	<a href="#">BackupDownloadRestriction</a>	Backup download restriction

### 3. Output Parameters

Parameter Name	Type	Description
BackupDownloadURL	String	Backup download URL
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Getting a backup download link

This example shows you how to get a backup download link.

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeBackupDownloadURL
<Common request parameters>

{
  "DBInstanceId": "postgres-oamgybor",
  "BackupType": "LogBackup",
  "BackupId": "f9509fc2-2281-551c-b937-86d38cf79f3b",
  "URLExpireTime": 12
}
```

#### Output Example

```
{
  "Response": {
    "BackupDownloadURL": "*****",
  }
}
```

```
"RequestId": "7c4e788e-5ec9-4125-bb80-7baabe2744dc"  
}  
}
```

## 5. Developer Resources

### SDK

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- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
InternalError.InstanceDataError	Failed to access database management service. Please contact customer service.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
InvalidParameterValue.ParameterValueExceedError	The maximum value of the parameter has been

	reached.
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.InstanceStatusLimitError	This operation cannot be performed on an instance in this status.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.

# DeleteLogBackup

最近更新时间：2023-10-13 09:42:59

## 1. API Description

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

This API is used to delete the specified log backup of an instance.

A maximum of 100 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DeleteLogBackup.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceId	Yes	String	Instance ID
LogBackupId	Yes	String	Log backup ID

## 3. Output Parameters

Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for

locating a problem.

## 4. Example

### Example1 Deleting a log backup of an instance

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DeleteLogBackup
<Common request parameters>

{
  "DBInstanceId": "postgres-2xmqduu9",
  "LogBackupId": "7b85234b-4f46-5047-b658-acb172074bf6"
}
```

#### Output Example

```
{
  "Response": {
    "RequestId": "171aa9e7-c171-4ee1-8416-e69659f71f93"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

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- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)



- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
FailedOperation.DatabaseAffectedError	Data operation failed. Please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
ResourceNotFound.InstanceNotFoundError	The instance does not exist.

# DeleteBaseBackup

最近更新时间：2023-10-13 09:42:59

## 1. API Description

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

This API is used to delete the specified full backup of an instance.

A maximum of 100 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DeleteBaseBackup.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceId	Yes	String	Instance ID
BaseBackupId	Yes	String	Base backup ID

## 3. Output Parameters

Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for

locating a problem.

## 4. Example

### Example1 Deleting a full backup of an instance

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DeleteBaseBackup
<Common request parameters>

{
  "BaseBackupId": "88d3a71e-b822-5728-9d41-d8cfc0d0556e",
  "DBInstanceId": "postgres-9n26zs6n"
}
```

#### Output Example

```
{
  "Response": {
    "RequestId": "e468f289-2313-4117-a5f0-f406faeefa24"
  }
}
```

## 5. Developer Resources

### SDK

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- [Tencent Cloud SDK 3.0 for Java](#)
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- [Tencent Cloud SDK 3.0 for Node.js](#)
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- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
FailedOperation.DatabaseAffectedError	Data operation failed. Please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
OperationDenied.CamDeniedError	This operation cannot be performed.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.

# CreateBaseBackup

最近更新时间：2023-10-13 09:42:59

## 1. API Description

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

This API is used to create a full backup of an instance.

A maximum of 100 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: CreateBaseBackup.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceId	Yes	String	Instance ID

## 3. Output Parameters

Parameter Name	Type	Description
BaseBackupId	String	Full backup set ID
RequestId	String	The unique request ID, which is returned for each request. RequestId is required

for locating a problem.

## 4. Example

### Example1 Creating a full backup of an instance

This example shows you how to create a full backup of an instance manually.

#### Input Example

```
POST / HTTP/1.1Host: postgres.tencentcloudapi.comContent-Type: application/jsonX-TC-Action: CreateBaseBackup<common request parameters>{ "DBInstanceId": "postgres-dzg9p3kb" }
```

#### Output Example

```
{
  "Response": {
    "RequestId": "abc",
    "BaseBackupId": "443c810b-53c6-5d8c-b6d2-1abbe5794529"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
FailedOperation.DatabaseAffectedError	Data operation failed. Please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.InstanceStatusLimitError	This operation cannot be performed on an instance in this status.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.

# Parameter Management APIs

## ModifyParameterTemplate

最近更新时间：2023-10-13 09:42:49

### 1. API Description

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

This API is used to modify the configurations, such as parameter template name and description. It can also be used to manage the parameter list in the parameter template.

A maximum of 100 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

### 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: ModifyParameterTemplate.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
TemplateId	Yes	String	Parameter template ID, which uniquely identifies a parameter template and cannot be modified.
TemplateName	No	String	Parameter template name, which can contain 1-60 letters, digits, and symbols (-_./()+=:@). If this field is



			empty, the original parameter template name will be used.
TemplateDescription	No	String	Parameter template description, which can contain 1-60 letters, digits, and symbols (-_./()+=:@). If this parameter is not passed in, the original parameter template description will be used.
ModifyParamEntrySet.N	No	Array of ParamEntry	The set of parameters to be modified or added. A parameter cannot be put to <code>ModifyParamEntrySet</code> and <code>DeleteParamSet</code> at the same time, that is, it cannot be modified/added and deleted at the same time.
DeleteParamSet.N	No	Array of String	The set of parameters to be deleted in the template. A parameter cannot be put to <code>ModifyParamEntrySet</code> and <code>DeleteParamSet</code> at the same time, that is, it cannot be modified/added and deleted at the same time.

### 3. Output Parameters

Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Modifying a parameter template

None

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: ModifyParameterTemplate
```

```
<Common request parameters>

{
  "TemplateId": "497857b4-4676-5583-8359-b697fe5968d9",
  "TemplateName": "test_template",
  "TemplateDescription": "test",
  "ModifyParamEntrySet": [
    {
      "Name": "max_wal_senders",
      "ExpectedValue": "360"
    },
    {
      "Name": "max_logical_replication_workers",
      "ExpectedValue": "360"
    }
  ],
  "DeleteParamSet": [
    "wal_level"
  ]
}
```

### Output Example

```
{
  "Response": {
    "RequestId": "6ace8140-6b9e-4e81-a8ad-ef3f92b2aa90"
  }
}
```

## 5. Developer Resources

### SDK

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- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)

- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
FailedOperation.FailedOperationError	Operation failed. Please try again later.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
OperationDenied.CamDeniedError	This operation cannot be performed.

# DescribeParameterTemplates

最近更新时间：2023-10-13 09:42:50

## 1. API Description

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

This API is used to query the list of parameter templates.

A maximum of 1000 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeParameterTemplates.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
Filters.N	No	Array of <a href="#">Filter</a>	Filter conditions. Valid values: <code>TemplateName</code> , <code>TemplateId</code> , <code>DBMajorVersion</code> , <code>DBEngine</code> .
Limit	No	Integer	The maximum number of results returned per page. Value range: 0-100. Default: <code>20</code> .
Offset	No	Integer	Data offset
OrderBy	No	String	Sorting metric. Valid values: <code>CreateTime</code> , <code>TemplateName</code> , <code>DBMajorVersion</code> .

OrderByType	No	String	Sorting order. Valid values: <code>asc</code> (ascending order), <code>desc</code> (descending order).
-------------	----	--------	--

### 3. Output Parameters

Parameter Name	Type	Description
TotalCount	Integer	The total number of eligible parameter templates
ParameterTemplateSet	Array of <a href="#">ParameterTemplate</a>	Parameter template list
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Querying the information of a parameter template

None

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeParameterTemplates
<Common request parameters>

{
  "OrderBy": "CreateTime",
  "OrderByType": "desc",
  "Limit": 0,
  "Filters": [
    {
      "Values": [
        "test"
      ],
      "Name": "TemplateName"
    }
  ],
}
```

```
"Offset": 10
}
```

## Output Example

```
{
  "Response": {
    "ParameterTemplateSet": [
      {
        "DBEngine": "postgresql",
        "DBMajorVersion": "13",
        "TemplateDescription": "test1",
        "TemplateId": "674538e8-4a03-5103-896c-9785c960bf02",
        "TemplateName": "test1"
      },
      {
        "DBEngine": "postgresql",
        "DBMajorVersion": "13",
        "TemplateDescription": "test2",
        "TemplateId": "423984bb-97fe-5693-a74f-63cc8dfb6c5d",
        "TemplateName": "test2"
      }
    ],
    "RequestId": "6224e7ed-d7d8-494c-835f-e1612345383f",
    "TotalCount": 2
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

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- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
FailedOperation.FailedOperationError	Operation failed. Please try again later.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
OperationDenied.CamDeniedError	This operation cannot be performed.

# DescribeParameterTemplateAttributes

最近更新时间：2023-10-13 09:44:33

## 1. API Description

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

This API is used to query the details of a parameter template, including basic information and parameter information.

A maximum of 1000 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeParameterTemplateAttributes.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
TemplateId	Yes	String	Parameter template ID

## 3. Output Parameters

Parameter Name	Type	Description
----------------	------	-------------



Parameter Name	Type	Description
TemplateId	String	Parameter template ID Note: This field may return null, indicating that no valid values can be obtained.
TotalCount	Integer	Number of parameters contained in the parameter template Note: This field may return null, indicating that no valid values can be obtained.
ParamInfoSet	Array of <a href="#">ParamInfo</a>	Parameter information contained in the parameter template Note: This field may return null, indicating that no valid values can be obtained.
TemplateName	String	Parameter template name Note: This field may return null, indicating that no valid values can be obtained.
DBMajorVersion	String	Database version applicable to a parameter template Note: This field may return null, indicating that no valid values can be obtained.
DBEngine	String	Database engine applicable to a parameter template Note: This field may return null, indicating that no valid values can be obtained.
TemplateDescription	String	Parameter template description Note: This field may return null, indicating that no valid values can be obtained.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Querying the details of a parameter template

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeParameterTemplateAttributes
<Common request parameters>
```

```
{
  "TemplateId": "c0456ace-31d1-54b1-a270-befa6bf960a5"
}
```

## Output Example

```
{
  "Response": {
    "DBEngine": "postgresql",
    "DBMajorVersion": "12",
    "ParamInfoSet": [
      {
        "Advanced": false,
        "ClassificationCN": "WAL",
        "ClassificationEN": "Write-Ahead Log",
        "CurrentValue": "logical",
        "DefaultValue": "replica",
        "EnumValue": [
          "replica",
          "logical"
        ],
        "ID": 854,
        "LastModifyTime": "",
        "Max": 0,
        "Min": 0,
        "Name": "wal_level",
        "NeedReboot": true,
        "ParamDescriptionEN": "Set the level of information written to the WAL.",
        "ParamValueType": "enum",
        "SpecRelated": false,
        "StandbyRelated": 0,
        "Unit": ""
      },
      {
        "Advanced": false,
        "ClassificationEN": "Resource Usage",
        "CurrentValue": "12",
        "DefaultValue": "8",
        "EnumValue": null,
        "ID": 755,
        "LastModifyTime": "",
        "Max": 262143,
        "Min": 0,
        "Name": "max_worker_processes",
        "NeedReboot": true,
        "ParamDescriptionEN": "Maximum number of concurrent worker processes.",

```

```

"ParamValueType": "integer",
"SpecRelated": true,
"StandbyRelated": 1,
"Unit": ""
}
],
"RequestId": "e4f0f472-8bef-4404-b3fa-57ed6b6378b8",
"TemplateDescription": "test-modify",
"TemplateId": "c0456ace-31d1-54b1-a270-befa6bf960a5",
"TemplateName": "test-modify_1",
"TotalCount": 2
}
}

```

## 5. Developer Resources

### SDK

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- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
FailedOperation.FailedOperationError	Operation failed. Please try again later.

# DescribeDefaultParameters

最近更新时间：2023-10-13 09:44:54

## 1. API Description

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

This API is used to query all parameters supported by a database version and engine.

A maximum of 1000 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeDefaultParameters.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBMajorVersion	Yes	String	The major database version number, such as 11, 12, 13.
DBEngine	Yes	String	Database engine, such as postgresql, mssql_compatible.

## 3. Output Parameters

Parameter Name	Type	Description
----------------	------	-------------

Parameter Name	Type	Description
TotalCount	Integer	Number of parameters
ParamInfoSet	Array of <a href="#">ParamInfo</a>	Parameter information Note: This field may return null, indicating that no valid values can be obtained.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Querying the information of all parameters that can be added by a parameter template

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeDefaultParameters
<Common request parameters>

{
  "DBMajorVersion": "13",
  "DBEngine": "postgresql"
}
```

#### Output Example

```
{
  "Response": {
    "TotalCount": 2,
    "RequestId": "xx",
    "ParamInfoSet": [
      {
        "Advanced": false,
        "ClassificationCN": "AUTOVACUUM",
        "ClassificationEN": "Autovacuum",
        "CurrentValue": "",
        "DefaultValue": "-1",
```

```
"EnumValue": null,
"ID": 1409,
"LastModifyTime": "",
"Max": 10000,
"Min": -1,
"Name": "autovacuum_vacuum_cost_limit",
"NeedReboot": false,
"ParamDescriptionEN": "Vacuum cost amount available before napping, for autovacuum.",
"ParamValueType": "integer",
"SpecRelated": false,
"StandbyRelated": 0,
"Unit": ""
},
{
"Advanced": false,
"ClassificationEN": "Replication",
"CurrentValue": "",
"DefaultValue": "27",
"EnumValue": null,
"ID": 1592,
"LastModifyTime": "",
"Max": 650,
"Min": 27,
"Name": "max_wal_senders",
"NeedReboot": true,
"ParamDescriptionEN": "Sets the maximum number of simultaneously running WAL sender processes.",
"ParamValueType": "integer",
"SpecRelated": true,
"StandbyRelated": 1,
"Unit": ""
}
]
}
}
```

## 5. Developer Resources

### SDK

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- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
InvalidParameter.ParameterCheckError	Failed to check the parameter.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value

# DeleteParameterTemplate

最近更新时间：2023-10-13 09:42:51

## 1. API Description

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

This API is used to delete a parameter template.

A maximum of 100 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DeleteParameterTemplate.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
TemplateId	Yes	String	Parameter template ID, which uniquely identifies the parameter template to be operated.

## 3. Output Parameters

Parameter Name	Type	Description



RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.
-----------	--------	--

## 4. Example

### Example1 Deleting a parameter template

None

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DeleteParameterTemplate
<Common request parameters>

{
  "TemplateId": "497857b4-4676-5583-8359-b697fe5968d9"
}
```

#### Output Example

```
{
  "Response": {
    "RequestId": "xx"
  }
}
```

## 5. Developer Resources

### SDK

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- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)

- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
FailedOperation.FailedOperationError	Operation failed. Please try again later.

# CreateParameterTemplate

最近更新时间：2023-10-13 09:42:51

## 1. API Description

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

This API is used to create a parameter template.

A maximum of 100 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: CreateParameterTemplate.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
TemplateName	Yes	String	Template name, which can contain 1-60 letters, digits, and symbols (-_./()+=:@).
DBMajorVersion	Yes	String	The major database version number, such as 11, 12, 13.
DBEngine	Yes	String	Database engine, such as postgresql, mssql_compatible.
TemplateDescription	No	String	Parameter template description, which can contain 1-60 letters, digits, and symbols (-_./()+=:@).

### 3. Output Parameters

Parameter Name	Type	Description
TemplateId	String	Parameter template ID, which uniquely identifies a parameter template.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Creating a parameter template

The database version is PostgreSQL 14, and the engine is postgresql. You can customize the name and description of a parameter template.

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: CreateParameterTemplate
<Common request parameters>

{
  "TemplateName": "test_template",
  "DBMajorVersion": "13",
  "DBEngine": "postgresql",
  "TemplateDescription": "test"
}
```

#### Output Example

```
{
  "Response": {
    "RequestId": "6ace8140-6b9e-4e81-a8ad-ef3f92b2aa90",
    "TemplateId": "497857b4-4676-5583-8359-b697fe5968d9"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

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- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
InvalidParameter.ParameterCheckError	Failed to check the parameter.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
OperationDenied.CamDeniedError	This operation cannot be performed.

# ModifyDBInstanceParameters

最近更新时间：2023-10-13 09:42:50

## 1. API Description

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

This API is used to modify instance parameters.

A maximum of 100 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: ModifyDBInstanceParameters.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceid	Yes	String	Instance ID
ParamList.N	Yes	Array of <a href="#">ParamEntry</a>	Parameters to be modified and their new values

## 3. Output Parameters

Parameter	Type	Description
-----------	------	-------------

Name		
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Modifying a single parameter for an instance

u200cThis example shows you how to modify the value of the `max_replication_slots` parameter to `20` for an instance.

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: ModifyDBInstanceParameters
<Common request parameters>

{
  "DBInstanceId": "postgres-lzrwgg6d",
  "ParamList": [
    {
      "Name": "max_replication_slots",
      "ExpectedValue": "20"
    }
  ]
}
```

#### Output Example

```
{
  "Response": {
    "RequestId": "ec555918-0c22-42ea-aa23-730167195708"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

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- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
FailedOperation.CamAuthFailed	CAM authentication failed.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
InternalError.InternalHttpServerError	An exception occurred while executing the request.
InvalidParameterValue.DataConvertError	Failed to convert data format. Please contact customer service.
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.InstanceStatusLimitError	This operation cannot be performed on an instance in this status.
OperationDenied.InstanceStatusLimitOpError	This operation cannot be performed on an instance in this status.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.



# DescribeParamsEvent

最近更新时间：2023-10-13 09:42:50

## 1. API Description

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

This API is used to query the parameter modification event.

A maximum of 1000 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeParamsEvent.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceId	Yes	String	Instance ID

## 3. Output Parameters

Parameter Name	Type	Description
TotalCount	Integer	Total number of modified parameters

EventItems	Array of <a href="#">EventItem</a>	Details of parameter modification events
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Getting the list of instance parameter modification events

This example shows you how to get the statuses and records of parameter modification events.

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeParamsEvent
<Common request parameters>

{
  "DBInstanceId": "postgres-nbvqjlhf"
}
```

#### Output Example

```
{
  "Response": {
    "EventItems": [
      {
        "EventCount": 1,
        "EventDetail": [
          {
            "EffectiveTime": "0001-01-01 00:00:00",
            "EventLog": "",
            "ModifyTime": "2021-08-11 21:51:12",
            "NewValue": "off",
            "OldValue": "on",
            "Operator": "100130115276",
            "ParamName": "array_nulls",
            "State": "success"
          }
        ],
        "ParamName": "array_nulls"
      }
    ]
  }
}
```

```
},
{
  "EventCount": 1,
  "EventDetail": [
    {
      "EffectiveTime": "2021-08-16 15:33:41",
      "EventLog": "Pause: Paused. Internal error, in manual processing",
      "ModifyTime": "2021-08-16 15:28:13",
      "NewValue": "7",
      "OldValue": "8",
      "Operator": "100000115276",
      "ParamName": "max_worker_processes",
      "State": "paused"
    }
  ],
  "ParamName": "max_worker_processes"
},
{
  "RequestId": "",
  "TotalCount": 2
}
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
FailedOperation.CamAuthFailed	CAM authentication failed.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
FailedOperation.OssOperationFailed	Failed to request the backend API.
InternalError.InternalHttpServerError	An exception occurred while executing the request.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.InstanceAccessDeniedError	You do not have the permission to operate this resource.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.

# DescribeDBInstanceParameters

最近更新时间：2023-10-13 09:45:13

## 1. API Description

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

This API is used to query the parameters of an instance.

A maximum of 1000 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeDBInstanceParameters.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceid	Yes	String	Instance ID
ParamName	No	String	Name of the parameter to be queried. If <code>ParamName</code> is left empty or not passed in, the list of all parameters will be returned.

## 3. Output Parameters

Parameter Name	Type	Description
TotalCount	Integer	Total number of the parameters in the returned list
Detail	Array of <a href="#">ParamInfo</a>	Details of the returned parameter list
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Querying the information of parameter specified by the instance

This example shows you how to query the parameter information of the parameters `postgres-lzrwgg6d` and `max_connections`.

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeDBInstanceParameters
<Common request parameters>

{
  "ParamName": "max_connections",
  "DBInstanceId": "postgres-lzrwgg6d"
}
```

#### Output Example

```
{
  "Response": {
    "Detail": [
      {
        "Advanced": false,
        "ClassificationEN": "Connections and Authentication",
        "CurrentValue": "2048",
        "DefaultValue": "2048",
        "EnumValue": null,
        "ID": 15124,
        "LastModifyTime": ""
      }
    ]
  }
}
```

```
"Max": 2048,
"Min": 100,
"Name": "max_connections",
"NeedReboot": true,
"ParamDescriptionCH": "Maximum instance connections",
"ParamDescriptionEN": "Sets the maximum number of concurrent connections.",
"ParamValueType": "integer",
"SpecRelated": true,
"SpecRelationSet": null,
"StandbyRelated": 0,
"Unit": "",
"VersionRelationSet": null
}
],
"RequestId": "ce4ecf74-b26f-44e7-9340-539032e92b9f",
"TotalCount": 1
}
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
FailedOperation.CamAuthFailed	CAM authentication failed.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
InternalServerError.InternalHttpServerError	An exception occurred while executing the request.
InternalServerError.UnknownError	Unknown error. When this error occurs, please contact customer service for assistance.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.InstanceAccessDeniedError	You do not have the permission to operate this resource.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.
UnknownError	Unknown error. When this error occurs, please contact customer service for assistance.



# Network APIs

## OpenDBExtranetAccess

最近更新时间：2023-10-13 09:42:51

### 1. API Description

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

This API is used to enable the public network access of an instance.

A maximum of 100 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

### 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: OpenDBExtranetAccess.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceid	Yes	String	Instance ID in the format of postgres-hez4fh0v
Islpv6	No	Integer	Whether to enable public network access over IPv6 address. Valid values: 1 (yes), 0 (no)

### 3. Output Parameters

Parameter Name	Type	Description
FlowId	Integer	Async task flow ID
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Enabling the public network access for an instance

This example shows you how to enable the public network access for the instance "postgres-apzvwncr".

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: OpenDBExtranetAccess
<Common request parameters>

{
  "DBInstanceId": "postgres-apzvwncr"
}
```

#### Output Example

```
{
  "Response": {
    "FlowId": 1234,
    "RequestId": "08fdf411-5d39-44f2-8e1d-a58ee60b237d"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
AuthFailure.UnauthorizedOperation	Authentication failed.
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
FailedOperation.FlowCreateError	Failed to create a task. Please try again later. If the problem persists, please contact customer service.
InternalServerError.DBError	Backend database execution error.
InternalServerError.FlowError	Failed to create the flow.
InternalServerError.InternalHttpServerError	An exception occurred while executing the request.
InternalServerError.SystemError	System error. When this error occurs, please contact customer service for assistance.
InvalidParameter	Parameter error.

InvalidParameterValue.InstanceNotExist	The current instance does not exist.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
InvalidParameterValue.ParameterHandleError	Failed to process the parameter. Please check if the parameter value is valid.
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.InstanceAccessDeniedError	You do not have the permission to operate this resource.
OperationDenied.InstanceIpv6NotSupportedError	IPv6 is not supported.
OperationDenied.InstanceStatusLimitOpError	This operation cannot be performed on an instance in this status.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.
ResourceUnavailable.InvalidInstanceStatus	Incorrect instance status.

# CloseDBExtranetAccess

最近更新时间：2023-10-13 09:42:52

## 1. API Description

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

This API is used to disable the public network address of an instance.

A maximum of 100 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: CloseDBExtranetAccess.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceId	Yes	String	Instance ID in the format of postgres-6r233v55
IsIpv6	No	Integer	Whether to disable public network access over IPv6 address. Valid values: 1 (yes), 0 (no)

## 3. Output Parameters

Parameter	Type	Description
-----------	------	-------------

Name		
FlowId	Integer	Async task flow ID
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Disabling the public network access for an instance

This example shows you how to disable the public network access for the instance "postgres-apzvwncr".

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: CloseDBExtranetAccess
<Common request parameters>

{
  "DBInstanceId": "postgres-apzvwncr"
}
```

#### Output Example

```
{
  "Response": {
    "FlowId": 1234,
    "RequestId": "08fdf411-5d39-44f2-8e1d-a58ee60b237d"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)

- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
AuthFailure.UnauthorizedOperation	Authentication failed.
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
FailedOperation.FlowCreateError	Failed to create a task. Please try again later. If the problem persists, please contact customer service.
InternalError.DBError	Backend database execution error.
InternalError.FlowError	Failed to create the flow.
InternalError.InternalHttpServerError	An exception occurred while executing the request.
InternalError.SystemError	System error. When this error occurs, please contact customer service for assistance.
InvalidParameter	Parameter error.
InvalidParameterValue.InstanceNotExist	The current instance does not exist.

InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
InvalidParameterValue.ParameterHandleError	Failed to process the parameter. Please check if the parameter value is valid.
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.InstanceAccessDeniedError	You do not have the permission to operate this resource.
OperationDenied.InstanceStatusDeniedError	This operation cannot be performed on an instance in this status.
OperationDenied.InstanceStatusLimitOpError	This operation cannot be performed on an instance in this status.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.
ResourceUnavailable.InvalidInstanceStatus	Incorrect instance status.



# DeleteReadOnlyGroupNetworkAccess

最近更新时间：2023-10-13 09:42:51

## 1. API Description

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

This API is used to delete a network of an RO group.

A maximum of 100 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DeleteReadOnlyGroupNetworkAccess.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
ReadOnlyGroupId	Yes	String	RO group ID in the format of pgro-4t9c6g7k.
VpcId	Yes	String	Unified VPC ID. If you want to delete the classic network, set the parameter to <code>0</code> .
SubnetId	Yes	String	Subnet ID. If you want to delete the classic network, set the parameter to <code>0</code> .
Vip	Yes	String	Target VIP.

### 3. Output Parameters

Parameter Name	Type	Description
FlowId	Integer	Task ID. Note: This field may return <code>null</code> , indicating that no valid values can be obtained.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Deleting network for RO group

##### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DeleteReadOnlyGroupNetworkAccess
<Common request parameters>

{
  "SubnetId": "subnet-4s9dejli",
  "VpcId": "vpc-gaestjaf",
  "Vip": "127.0.0.1",
  "ReadOnlyGroupId": "pgro-4t9c6g7k"
}
```

##### Output Example

```
{
  "Response": {
    "RequestId": "6ace8140-6b9e-4e81-a8ad-ef3f92b2aa90",
    "FlowId": 912
  }
}
```

### 5. Developer Resources

## SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
AuthFailure	CAM signature/authentication error.
FailedOperation.CamAuthFailed	CAM authentication failed.
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAffectedError	Data operation failed. Please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
FailedOperation.FlowCreateError	Failed to create a task. Please try again later. If the problem persists, please contact customer service.
FailedOperation.GetVpcInfoError	Failed to query VPC information. Please try again later. If the problem persists, please contact customer service.
FailedOperation.NetworkNumLimitError	The number of networks does not meet resource requirements.

FailedOperation.ROGroupNotFoundError	The RO group does not exist.
InternalServerError.InternalHttpServerError	An exception occurred while executing the request.
InvalidParameter.VpcNotFoundError	Failed to query VPC information.
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.ROGroupStatusError	This operation cannot be performed on an RO group in this status.

# DeleteDBInstanceNetworkAccess

最近更新时间：2023-10-13 09:42:51

## 1. API Description

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

This API is used to delete a network of an instance.

A maximum of 100 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DeleteDBInstanceNetworkAccess.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceid	Yes	String	Instance ID in the format of postgres-6bwgamo3.
VpcId	Yes	String	Unified VPC ID. If you want to delete the classic network, set the parameter to 0 .
SubnetId	Yes	String	Subnet ID. If you want to delete the classic network, set the parameter to 0 .
Vip	Yes	String	Target VIP.

### 3. Output Parameters

Parameter Name	Type	Description
FlowId	Integer	Task ID. Note: This field may return <code>null</code> , indicating that no valid values can be obtained.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Deleting network for instance

##### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DeleteDBInstanceNetworkAccess
<Common request parameters>

{
  "SubnetId": "subnet-4s9dejli",
  "Vip": "127.0.0.1",
  "VpcId": "vpc-gaestjaf",
  "DBInstanceId": "postgres-6bwgamo3"
}
```

##### Output Example

```
{
  "Response": {
    "RequestId": "6ace8140-6b9e-4e81-a8ad-ef3f92b2aa90",
    "FlowId": 912
  }
}
```

### 5. Developer Resources

## SDK

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- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
AuthFailure	CAM signature/authentication error.
FailedOperation.CamAuthFailed	CAM authentication failed.
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAffectedError	Data operation failed. Please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
FailedOperation.FlowCreateError	Failed to create a task. Please try again later. If the problem persists, please contact customer service.
FailedOperation.GetVpcInfoError	Failed to query VPC information. Please try again later. If the problem persists, please contact customer

	service.
FailedOperation.NetworkNumLimitError	The number of networks does not meet resource requirements.
FailedOperation.QuerySpecError	Failed to query specifications. Please try again later. If the problem persists, please contact customer service.
FailedOperation.ServerlessNotSupportedError	Serverless instances do not support the operation.
InternalError.InternalHttpServerError	An exception occurred while executing the request.
InvalidParameter.VpcNotFoundError	Failed to query VPC information.
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.InstanceAccessDeniedError	You do not have the permission to operate this resource.
OperationDenied.InstanceStatusLimitOpError	This operation cannot be performed on an instance in this status.
OperationDenied.ROInstanceIpv6NotSupportedError	Read-only instances do not support IPv6.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.



# CreateReadOnlyGroupNetworkAccess

最近更新时间：2023-10-13 09:42:52

## 1. API Description

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

This API is used to create a network for an RO group.

A maximum of 100 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: CreateReadOnlyGroupNetworkAccess.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
ReadOnlyGroupId	Yes	String	RO group ID in the format of pgro-4t9c6g7k.
VpcId	Yes	String	Unified VPC ID.
SubnetId	Yes	String	Subnet ID.
IsAssignVip	Yes	Boolean	Whether to manually assign the VIP. Valid values: <code>true</code> (manually assign), <code>false</code> (automatically assign).
Vip	No	String	Target VIP.

### 3. Output Parameters

Parameter Name	Type	Description
FlowId	Integer	Task ID. Note: This field may return <code>null</code> , indicating that no valid values can be obtained.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Creating the network for an RO group

This example shows you how to create the network for an RO group.

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: CreateReadOnlyGroupNetworkAccess
<Common request parameters>

{
  "SubnetId": "subnet-4s9dejli",
  "VpcId": "vpc-gaestjaf",
  "ReadOnlyGroupId": "pgro-4t9c6g7k",
  "IsAssignVip": "false"
}
```

#### Output Example

```
{
  "Response": {
    "RequestId": "6ace8140-6b9e-4e81-a8ad-ef3f92b2aa90",
    "FlowId": 912
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
AuthFailure	CAM signature/authentication error.
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.CreateBasicNetworkDeniedError	Classic network creation is unsupported.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAffectedError	Data operation failed. Please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
FailedOperation.FlowCreateError	Failed to create a task. Please try again later. If the problem persists, please contact customer service.

FailedOperation.GetSubnetError	Failed to query VPC subnets.
FailedOperation.GetVpcInfoError	Failed to query VPC information. Please try again later. If the problem persists, please contact customer service.
FailedOperation.NetworkNumLimitError	The number of networks does not meet resource requirements.
FailedOperation.ROGroupNotFoundError	The RO group does not exist.
FlowError	Failed to create the task.
InternalError.FlowError	Failed to create the flow.
InternalError.InternalHttpServerError	An exception occurred while executing the request.
InternalError.MarshalError	Failed to parse background data. Please contact customer service.
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.ROGroupStatusError	This operation cannot be performed on an RO group in this status.

# CreateDBInstanceNetworkAccess

最近更新时间：2023-10-13 09:42:52

## 1. API Description

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

This API is used to create a network for an instance.

A maximum of 100 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: CreateDBInstanceNetworkAccess.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceid	Yes	String	Instance ID in the format of postgres-6bwgamo3.
VpcId	Yes	String	Unified VPC ID.
SubnetId	Yes	String	Subnet ID.
IsAssignVip	Yes	Boolean	Whether to manually assign the VIP. Valid values: <code>true</code> (manually assign), <code>false</code> (automatically assign).
Vip	No	String	Target VIP.

### 3. Output Parameters

Parameter Name	Type	Description
FlowId	Integer	Task ID. Note: This field may return <code>null</code> , indicating that no valid values can be obtained.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Creating a network for an instance

u200cu200cThis example shows you how to create a network for an instance.

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: CreateDBInstanceNetworkAccess
<Common request parameters>

{
  "SubnetId": "subnet-4s9dejli",
  "VpcId": "vpc-gaestjaf",
  "DBInstanceId": "postgres-6bwgamo3",
  "IsAssignVip": "false"
}
```

#### Output Example

```
{
  "Response": {
    "RequestId": "6ace8140-6b9e-4e81-a8ad-ef3f92b2aa90",
    "FlowId": 912
  }
}
```

## 5. Developer Resources

### SDK

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- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
AuthFailure	CAM signature/authentication error.
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.CreateBasicNetworkDeniedError	Classic network creation is unsupported.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAffectedError	Data operation failed. Please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
FailedOperation.FlowCreateError	Failed to create a task. Please try again later. If the problem persists, please contact customer service.

FailedOperation.GetSubnetError	Failed to query VPC subnets.
FailedOperation.GetVpcInfoError	Failed to query VPC information. Please try again later. If the problem persists, please contact customer service.
FailedOperation.NetworkNumLimitError	The number of networks does not meet resource requirements.
FailedOperation.QuerySpecError	Failed to query specifications. Please try again later. If the problem persists, please contact customer service.
FailedOperation.ServerlessNotSupportedError	Serverless instances do not support the operation.
FlowError	Failed to create the task.
InternalError.InternalHttpServerError	An exception occurred while executing the request.
InternalError.MarshalError	Failed to parse background data. Please contact customer service.
InvalidParameter.VpcNotFoundError	Failed to query VPC information.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.InstanceAccessDeniedError	You do not have the permission to operate this resource.
OperationDenied.InstanceIpv6NotSupportedError	IPv6 is not supported.
OperationDenied.InstanceStatusLimitOpError	This operation cannot be performed on an instance in this status.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.



# Security Group APIs

## ModifyDBInstanceSecurityGroups

最近更新时间：2023-10-13 09:42:46

### 1. API Description

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

This API is used to modify the security group of an instance.

A maximum of 100 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

### 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: ModifyDBInstanceSecurityGroups.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
SecurityGroupIdSet.N	Yes	Array of String	The list of security groups to be associated with the instance or RO groups. Information of security groups can be obtained from the <code>sgId</code> field in the returned value of the <a href="#">DescribeSecurityGroups</a> API.
DBInstanceId	No	String	Instance ID. Either this parameter or <code>ReadOnlyGroupId</code> must be passed in. If both parameters are passed in, <code>ReadOnlyGroupId</code> will be ignored.

ReadOnlyGroupId	No	String	RO group ID. Either this parameter or <code>DBInstanceId</code> must be passed in. To modify the security groups associated with the RO groups, only pass in <code>ReadOnlyGroupId</code> .
-----------------	----	--------	---

### 3. Output Parameters

Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Modifying a security group

This example shows you how to modify a security group.

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: ModifyDBInstanceSecurityGroups
<Common request parameters>

{
  "DBInstanceId": "postgres-i2q4utnp",
  "SecurityGroupIdSet": [
    "sg-91jbmkp1"
  ]
}
```

#### Output Example

```
{
  "Response": {
    "RequestId": "5fad142d-9597-408f-84b8-41a27a1486ce"
  }
}
```

## Example2 Modifying the security groups of an RO group

This example shows you how to modify the security groups of an RO group.

### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: ModifyDBInstanceSecurityGroups
<Common request parameters>

{
  "ReadOnlyGroupId": "pgrogrp-nqwpkjb",
  "SecurityGroupIdSet": [
    "sg-91jbmkp1"
  ]
}
```

### Output Example

```
{
  "Response": {
    "RequestId": "f81495e4-bca8-4946-b5b0-0aedc512413d"
  }
}
```

## 5. Developer Resources

### SDK

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- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
FailedOperation.FailedOperationError	Operation failed. Please try again later.
FailedOperation.ROGroupNotFoundError	The RO group does not exist.
InvalidParameter.ParameterCheckError	Failed to check the parameter.
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.InstanceAccessDeniedError	You do not have the permission to operate this resource.
OperationDenied.InstanceStatusLimitOpError	This operation cannot be performed on an instance in this status.
OperationDenied.ROGroupStatusError	This operation cannot be performed on an RO group in this status.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.

# DescribeDBInstanceSecurityGroups

最近更新时间：2023-10-13 09:42:46

## 1. API Description

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

This API is used to query the security group of an instance.

A maximum of 1000 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeDBInstanceSecurityGroups.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceid	No	String	Instance ID. Either this parameter or <code>ReadOnlyGroupId</code> must be passed in. If both parameters are passed in, <code>ReadOnlyGroupId</code> will be ignored.
ReadOnlyGroupId	No	String	RO group ID. Either this parameter or <code>DBInstanceId</code> must be passed in. To query the security groups associated with the RO groups, only pass in <code>ReadOnlyGroupId</code> .

## 3. Output Parameters

Parameter Name	Type	Description
SecurityGroupSet	Array of <a href="#">SecurityGroup</a>	Information of security groups in array
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Querying the security group of an RO group

This example shows you how to query the security group of an RO group.

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeDBInstanceSecurityGroups
<Common request parameters>

{
  "ReadOnlyGroupId": "pgrogrp-nqwpkjb"
}
```

#### Output Example

```
{
  "Response": {
    "RequestId": "47e3764e-bce4-477a-a293-49ffa1bfb447",
    "SecurityGroupSet": [
      {
        "CreateTime": "2022-08-30 21:36:58",
        "Inbound": [],
        "Outbound": [],
        "ProjectId": 0,
        "SecurityGroupDescription": "Custom222",
        "SecurityGroupId": "sg-116auwb1",
        "SecurityGroupName": "Custom222-202208302136517989"
      },
      {
        "CreateTime": "2022-10-20 21:38:20",
        "Inbound": [
```

```
{
  "Action": "ACCEPT",
  "CidrIp": "0.0.0.0/0",
  "Description": "Allow Ping service",
  "IpProtocol": "icmp",
  "PortRange": "ALL"
},
{
  "Action": "ACCEPT",
  "CidrIp": "::/0",
  "Description": "Allow Ping service",
  "IpProtocol": "icmpv6",
  "PortRange": "ALL"
},
{
  "Action": "ACCEPT",
  "CidrIp": "0.0.0.0/0",
  "Description": "Allow Linux SSH login",
  "IpProtocol": "tcp",
  "PortRange": "22"
},
{
  "Action": "ACCEPT",
  "CidrIp": "::/0",
  "Description": "Allow Linux SSH login",
  "IpProtocol": "tcp",
  "PortRange": "22"
},
{
  "Action": "ACCEPT",
  "CidrIp": "0.0.0.0/0",
  "Description": "Allow remote Windows login",
  "IpProtocol": "tcp",
  "PortRange": "3389"
},
{
  "Action": "ACCEPT",
  "CidrIp": "::/0",
  "Description": "Allow remote Windows login",
  "IpProtocol": "tcp",
  "PortRange": "3389"
},
{
  "Action": "ACCEPT",
  "CidrIp": "10.0.0.0/8",
  "Description": "Enable the private network (VPC)",
  "IpProtocol": "ALL",
```

```

"PortRange": "ALL"
},
{
"Action": "ACCEPT",
"CidrIp": "172.16.0.0/12",
>Description": "Enable the private network (VPC)",
"IpProtocol": "ALL",
"PortRange": "ALL"
},
{
"Action": "ACCEPT",
"CidrIp": "192.168.0.0/16",
>Description": "Enable the private network (VPC)",
"IpProtocol": "ALL",
"PortRange": "ALL"
},
{
"Action": "ACCEPT",
"CidrIp": "0.0.0.0/0",
>Description": "Open ports for Web service",
"IpProtocol": "tcp",
"PortRange": "80"
},
{
"Action": "ACCEPT",
"CidrIp": "::/0",
>Description": "Open ports for Web service",
"IpProtocol": "tcp",
"PortRange": "80"
},
{
"Action": "ACCEPT",
"CidrIp": "0.0.0.0/0",
>Description": "Open ports for Web service",
"IpProtocol": "tcp",
"PortRange": "443"
},
{
"Action": "ACCEPT",
"CidrIp": "::/0",
>Description": "Open ports for Web service",
"IpProtocol": "tcp",
"PortRange": "443"
}
],
"Outbound": [
{

```



```
"Action": "ACCEPT",
"CidrIp": "0.0.0.0/0",
>Description": "",
"IpProtocol": "ALL",
"PortRange": "ALL"
},
{
>Action": "ACCEPT",
"CidrIp": "",
>Description": "",
"IpProtocol": "ALL",
"PortRange": "ALL"
}
],
"ProjectId": 0,
"SecurityGroupDescription": "Custom template",
"SecurityGroupId": "sg-91jbmkp1",
"SecurityGroupName": "Custom template-20221020213819279"
},
{
>CreateTime": "2022-08-22 17:34:08",
>Inbound": [
{
>Action": "ACCEPT",
"CidrIp": "0.0.0.0/0",
>Description": "Open all inbound rules",
"IpProtocol": "tcp",
"PortRange": "22,3389,80,443,20,21"
},
{
>Action": "ACCEPT",
"CidrIp": "0.0.0.0/0",
>Description": "Open all inbound rules",
"IpProtocol": "icmp",
"PortRange": "ALL"
}
],
"Outbound": [
{
>Action": "ACCEPT",
"CidrIp": "0.0.0.0/0",
>Description": "u200cOpen all inbound rules",
"IpProtocol": "ALL",
"PortRange": "ALL"
}
],
"ProjectId": 0,
```

```
"SecurityGroupDescription": "Deny all rules",
"SecurityGroupId": "sg-mpkb1net",
"SecurityGroupName": "Custom-2022082217335427078"
}
]
}
}
```

## Example2 Querying the security group of an instance

This example shows you how to query the security group of an instance.

### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeDBInstanceSecurityGroups
<Common request parameters>

{
  "DBInstanceId": "postgres-i2q4utnp"
}
```

### Output Example

```
{
  "Response": {
    "RequestId": "770234c2-8a51-4d06-b3f7-4454664848b1",
    "SecurityGroupSet": [
      {
        "CreateTime": "2022-10-20 21:38:20",
        "Inbound": [
          {
            "Action": "ACCEPT",
            "CidrIp": "0.0.0.0/0",
            "Description": "Allow Ping service",
            "IpProtocol": "icmp",
            "PortRange": "ALL"
          },
          {
            "Action": "ACCEPT",
            "CidrIp": "::/0",
            "Description": "Allow Ping service",
            "IpProtocol": "icmpv6",
            "PortRange": "ALL"
          }
        ]
      }
    ]
  }
}
```

```

},
{
  "Action": "ACCEPT",
  "CidrIp": "0.0.0.0/0",
  "Description": "Allow Linux SSH login",
  "IpProtocol": "tcp",
  "PortRange": "22"
},
{
  "Action": "ACCEPT",
  "CidrIp": "::/0",
  "Description": "Allow Linux SSH login",
  "IpProtocol": "tcp",
  "PortRange": "22"
},
{
  "Action": "ACCEPT",
  "CidrIp": "0.0.0.0/0",
  "Description": "Allow remote Windows login",
  "IpProtocol": "tcp",
  "PortRange": "3389"
},
{
  "Action": "ACCEPT",
  "CidrIp": "::/0",
  "Description": "Allow remote Windows login",
  "IpProtocol": "tcp",
  "PortRange": "3389"
},
{
  "Action": "ACCEPT",
  "CidrIp": "10.0.0.0/8",
  "Description": "Enable the private network (VPC)",
  "IpProtocol": "ALL",
  "PortRange": "ALL"
},
{
  "Action": "ACCEPT",
  "CidrIp": "172.16.0.0/12",
  "Description": "Enable the private network (VPC)",
  "IpProtocol": "ALL",
  "PortRange": "ALL"
},
{
  "Action": "ACCEPT",
  "CidrIp": "192.168.0.0/16",
  "Description": "Enable the private network (VPC)",

```

```
"IpProtocol": "ALL",
"PortRange": "ALL"
},
{
  "Action": "ACCEPT",
  "CidrIp": "0.0.0.0/0",
  "Description": "Open ports for Web service",
  "IpProtocol": "tcp",
  "PortRange": "80"
},
{
  "Action": "ACCEPT",
  "CidrIp": "::/0",
  "Description": "Open ports for Web service",
  "IpProtocol": "tcp",
  "PortRange": "80"
},
{
  "Action": "ACCEPT",
  "CidrIp": "0.0.0.0/0",
  "Description": "Open ports for Web service",
  "IpProtocol": "tcp",
  "PortRange": "443"
},
{
  "Action": "ACCEPT",
  "CidrIp": "::/0",
  "Description": "Open ports for Web service",
  "IpProtocol": "tcp",
  "PortRange": "443"
}
],
"Outbound": [
  {
    "Action": "ACCEPT",
    "CidrIp": "0.0.0.0/0",
    "Description": "",
    "IpProtocol": "ALL",
    "PortRange": "ALL"
  },
  {
    "Action": "ACCEPT",
    "CidrIp": "",
    "Description": "",
    "IpProtocol": "ALL",
    "PortRange": "ALL"
  }
]
```

```
],  
"ProjectId": 0,  
"SecurityGroupDescription": "Custom template",  
"SecurityGroupId": "sg-91jbmkp1",  
"SecurityGroupName": "Custom template-20221020213819279"  
}  
]  
}  
}
```

## 5. Developer Resources

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- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
FailedOperation.FailedOperationError	Operation failed. Please try again later.
FailedOperation.ROGroupNotFoundError	The RO group does not exist.
InvalidParameter.ParameterCheckError	Failed to check the parameter.

OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.InstanceAccessDeniedError	You do not have the permission to operate this resource.
OperationDenied.InstanceStatusLimitOpError	This operation cannot be performed on an instance in this status.
OperationDenied.ROGroupStatusError	This operation cannot be performed on an RO group in this status.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.

# Performance Optimization APIs

## DescribeSlowQueryList

最近更新时间：2023-10-13 09:42:49

### 1. API Description

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

This API is used to get the slow queries during the specified period of time.

A maximum of 100 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

### 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeSlowQueryList.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceId	Yes	String	Instance ID.
StartTime	Yes	String	Start timestamp of the query range in the format of "YYYY-MM-DD HH:mm:ss". The log is retained for seven days by default, so the start timestamp must fall within the retention period.
EndTime	Yes	String	End timestamp of the query range in the format of "YYYY-MM-DD HH:mm:ss".

DatabaseName	No	String	Filter by database name. This parameter is optional.
OrderByType	No	String	Sorting order. Valid values: <code>asc</code> (ascending), <code>desc</code> (descending). Default value: <code>desc</code> .
OrderBy	No	String	Sort by field. Valid values: <code>SessionStartTime</code> (default), <code>Duration</code> .
Limit	No	Integer	Number of entries per page. Value range: [1,100]. Default value: <code>20</code> .
Offset	No	Integer	Pagination offset. Value range: [0,INF). Default value: <code>0</code> .

### 3. Output Parameters

Parameter Name	Type	Description
TotalCount	Integer	The total number of slow query statements during the specified period of time.
DurationAnalysis	Array of <a href="#">DurationAnalysis</a>	Analysis of the execution time of slow query statements by classifying them to different time ranges. These slow query statements fall within the query range you specified in the request parameters. Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
RawSlowQueryList	Array of <a href="#">RawSlowQuery</a>	The list of slow query details during the specified period of time. Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Querying the list of slow queries

##### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
```



```

Content-Type: application/json
X-TC-Action: DescribeSlowQueryList
<Common request parameters>

{
  "StartTime": "2021-07-22 10:00:07",
  "EndTime": "2021-07-27 20:15:07",
  "Limit": 10,
  "Offset": 0,
  "DBInstanceId": "postgres-nbvqjlhf"
}
    
```

## Output Example

```

{
  "Response": {
    "DurationAnalysis": [
      {
        "Count": 0,
        "TimeSegment": "10-20s"
      },
      {
        "Count": 0,
        "TimeSegment": "40-50s"
      },
      {
        "Count": 0,
        "TimeSegment": "50s-"
      },
      {
        "Count": 0,
        "TimeSegment": "5-6s"
      },
      {
        "Count": 0,
        "TimeSegment": "6-7s"
      },
      {
        "Count": 0,
        "TimeSegment": "2-3s"
      },
      {
        "Count": 0,
        "TimeSegment": "20-30s"
      },
      {
    
```

```
"Count": 0,
"TimeSegment": "3-4s"
},
{
"Count": 0,
"TimeSegment": "4-5s"
},
{
"Count": 0,
"TimeSegment": "7-8s"
},
{
"Count": 0,
"TimeSegment": "8-9s"
},
{
"Count": 0,
"TimeSegment": "9-10s"
},
{
"Count": 0,
"TimeSegment": "30-40s"
},
{
"Count": 6,
"TimeSegment": "1-2s"
}
],
"RawSlowQueryList": [
{
"ClientAddr": "[local]",
"DatabaseName": "postgres",
"Duration": 101.013,
"RawQuery": "select 1 from information_schema.tables where table_schema = 'pg_catalog' and table_name = 'pg_file_settings'",
"SessionStartTime": "2021-07-27 03:12:01 CST",
"UserName": "postgres"
},
{
"ClientAddr": "::1:34301",
"DatabaseName": "postgres",
"Duration": 155.283,
"RawQuery": "select count(*)::text as value from pg_stat_activity where now()-backend_start < '5 second';",
"SessionStartTime": "2021-07-25 02:25:09 CST",
"UserName": "postgres"
},
}
```

```
{
  "ClientAddr": "::1:34295",
  "DatabaseName": "postgres",
  "Duration": 168.119,
  "RawQuery": "select count(*)::text as value from pg_stat_activity where state='active';",
  "SessionStartTime": "2021-07-25 02:25:09 CST",
  "UserName": "postgres"
},
{
  "ClientAddr": "::1:34296",
  "DatabaseName": "postgres",
  "Duration": 168.757,
  "RawQuery": "select count(*)::text as value from pg_stat_activity where wait_event_type is not null",
  "SessionStartTime": "2021-07-25 02:25:09 CST",
  "UserName": "postgres"
},
{
  "ClientAddr": "::1:34298",
  "DatabaseName": "postgres",
  "Duration": 165.119,
  "RawQuery": "select application_name, COALESCE(pg_catalog.pg_wal_lsn_diff(sent_lsn, replay_lsn), 0) from pg_stat_replication;",
  "SessionStartTime": "2021-07-25 02:25:09 CST",
  "UserName": "postgres"
},
{
  "ClientAddr": "::1:34297",
  "DatabaseName": "postgres",
  "Duration": 104.795,
  "RawQuery": "select count(*)::text as value from pg_stat_activity where state='idle';",
  "SessionStartTime": "2021-07-25 02:25:09 CST",
  "UserName": "postgres"
}
],
"RequestId": "221334ddcf",
"TotalCount": 6
}
```

## 5. Developer Resources

## SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAffectedError	Data operation failed. Please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
InternalServerError.InternalHttpServerError	An exception occurred while executing the request.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
InvalidParameterValue.ParameterValueExceedError	The maximum value of the parameter has been reached.
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.InstanceAccessDeniedError	You do not have the permission to operate this resource.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.

# DescribeSlowQueryAnalysis

最近更新时间：2023-10-13 09:42:49

## 1. API Description

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

This API is used to count and analyze slow query statements during the specified period of time and return aggregated statistical analysis results which are classified by statement with abstract parameter values.

A maximum of 100 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeSlowQueryAnalysis.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceId	Yes	String	Instance ID.
StartTime	Yes	String	Start timestamp of the query range in the format of "YYYY-MM-DD HH:mm:ss". The log is retained for seven days by default, so the start timestamp must fall within the retention period.
EndTime	Yes	String	End timestamp of the query range in the format of "YYYY-MM-DD HH:mm:ss".
DatabaseName	No	String	Filter by database name. This parameter is optional.

OrderBy	No	String	Sort by field. Valid values: <code>CallNum</code> , <code>CostTime</code> , <code>AvgCostTime</code> . Default value: <code>CallNum</code> .
OrderByType	No	String	Sorting order. Valid values: <code>asc</code> (ascending), <code>desc</code> (descending). Default value: <code>desc</code> .
Limit	No	Integer	Number of entries per page. Value range: [1,100]. Default value: <code>50</code> .
Offset	No	Integer	Pagination offset. Value range: [0,INF). Default value: <code>0</code> .

### 3. Output Parameters

Parameter Name	Type	Description
TotalCount	Integer	The total number of query results.
Detail	<a href="#">Detail</a>	Detailed analysis.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Analyzing slow queries of instance

##### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeSlowQueryAnalysis
<Common request parameters>

{
  "StartTime": "2021-06-17 20:00:07",
  "EndTime": "2021-06-17 20:15:07",
  "Limit": 10,
  "Offset": 0,
  "DBInstanceId": "postgres-nbvqjlhf"
}
```

## Output Example

```
{
  "Response": {
    "Detail": {
      "AnalysisItems": [
        {
          "AvgCostTime": 101.01300048828125,
          "ClientAddr": "",
          "CostPercent": 11.703700311890035,
          "CostTime": 101.01300048828125,
          "DatabaseName": "postgres",
          "FirstTime": "2021-07-27 03:12:01",
          "LastTime": "2021-07-27 03:12:01",
          "MaxCostTime": 101.01300048828125,
          "MinCostTime": 101.01300048828125,
          "NormalQuery": "select $1 from information_schema.tables where table_schema = $2
and table_name = $3",
          "UserName": "postgres"
        }
      ],
      "TotalCallNum": 6,
      "TotalTime": 863.0860137939453
    },
    "RequestId": "221334ddc4f",
    "TotalCount": 5
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)

- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
FailedOperation.ESQueryError	Failed to query ES. Please try again later. If the problem persists, please contact customer service.
InternalServerError.InternalHttpServerError	An exception occurred while executing the request.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
InvalidParameterValue.ParameterValueExceedError	The maximum value of the parameter has been reached.
OperationDenied.CamDeniedError	This operation cannot be performed.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.



# DescribeDBErrlogs

最近更新时间：2023-10-13 09:42:49

## 1. API Description

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

This API is used to query an error log.

A maximum of 100 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeDBErrlogs.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceId	Yes	String	Instance ID
StartTime	Yes	Timestamp	Query start time in the format of 2018-01-01 00:00:00. The log is retained for seven days by default, so the start time must fall within the retention period.
EndTime	Yes	Timestamp	Query end time in the format of 2018-01-01 00:00:00
DatabaseName	No	String	Database name

SearchKeys.N	No	Array of String	Keywords used for search
Limit	No	Integer	Number of results returned per page. Value range: 1-100. Default value: 50 .
Offset	No	Integer	Data offset, which starts from 0. Default value: 0 .

### 3. Output Parameters

Parameter Name	Type	Description
TotalCount	Integer	Number of logs returned in a single query. Maximum value: 10000 .
Details	Array of <a href="#">ErrLogDetail</a>	Detailed sets of error logs
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Getting error logs

This example shows you how to get the error logs in a specified time range.

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeDBErrlogs
<Common request parameters>

{
  "EndTime": "2018-06-11 17:06:38",
  "DBInstanceId": "postgres-apzvwncr",
  "StartTime": "2018-06-10 17:06:38"
}
```

## Output Example

```
{
  "Response": {
    "TotalCount": 10,
    "RequestId": "061bdcc0-6845-431a-a85e-ff591a352760",
    "Details": [
      {
        "UserName": "postgres",
        "ErrTime": "2018-06-22 15:22:52",
        "ErrMsg": "WARNING: there is no transaction in progress ",
        "Database": "dee"
      },
      {
        "UserName": "postgres",
        "ErrTime": "2018-06-22 15:22:52",
        "ErrMsg": "WARNING: there is no transaction in progress ",
        "Database": "dee"
      },
      {
        "UserName": "postgres",
        "ErrTime": "2018-06-22 15:23:09",
        "ErrMsg": "WARNING: there is no transaction in progress ",
        "Database": "dee"
      },
      {
        "UserName": "postgres",
        "ErrTime": "2018-06-22 15:23:10",
        "ErrMsg": "WARNING: there is no transaction in progress ",
        "Database": "dee"
      },
      {
        "UserName": "postgres",
        "ErrTime": "2018-06-22 15:23:10",
        "ErrMsg": "WARNING: there is no transaction in progress ",
        "Database": "dee"
      },
      {
        "UserName": "postgres",
        "ErrTime": "2018-06-22 15:23:11",
        "ErrMsg": "WARNING: there is no transaction in progress ",
        "Database": "dee"
      },
      {
        "UserName": "postgres",
        "ErrTime": "2018-06-22 15:23:11",
        "ErrMsg": "WARNING: there is no transaction in progress ",
        "Database": "dee"
      }
    ]
  }
}
```

```
"Database": "dee"
},
{
  "UserName": "postgres",
  "ErrTime": "2018-06-22 15:23:29",
  "ErrMsg": "WARNING: there is no transaction in progress ",
  "Database": "dee"
},
{
  "UserName": "root",
  "ErrTime": "2018-06-22 15:25:01",
  "ErrMsg": "ERROR: canceling autovacuum task CONTEXT: automatic analyze of table
\"dee.public.orders\" ",
  "Database": "dee"
},
{
  "UserName": "root",
  "ErrTime": "2018-06-22 15:25:10",
  "ErrMsg": "ERROR: canceling autovacuum task CONTEXT: automatic analyze of table
\"dee.public.partsupp\" ",
  "Database": "dee"
}
]
}
}
```

## 5. Developer Resources

### SDK

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- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
AuthFailure.UnauthorizedOperation	Authentication failed.
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.ESConnectError	Failed to access ES. Please try again later. If the problem persists, please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
InternalError.DBError	Backend database execution error.
InternalError.InternalHttpServerError	An exception occurred while executing the request.
InternalError.SystemError	System error. When this error occurs, please contact customer service for assistance.
InvalidParameter	Parameter error.
InvalidParameter.ParameterCheckError	Failed to check the parameter.
InvalidParameterValue.InstanceNotExist	The current instance does not exist.
InvalidParameterValue.InterfaceNameNotFound	Incorrect <code>ACTION</code> .
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
InvalidParameterValue.ParameterHandleError	Failed to process the parameter. Please check if the parameter value is valid.
InvalidParameterValue.ParameterValueExceedError	The maximum value of the parameter has been reached.

OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.InstanceAccessDeniedError	You do not have the permission to operate this resource.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.

# DescribeDBSlowlogs

最近更新时间：2023-10-13 09:42:49

## 1. API Description

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

This API is used to get a slow query log. Since it was deprecated on September 1, 2021, it has no longer returned data. You need to use the [DescribeSlowQueryList](#) API instead to get slow query logs.

A maximum of 100 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeDBSlowlogs.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceId	Yes	String	Instance ID in the format of postgres-lnp6j617
StartTime	Yes	Timestamp	Query start time in the format of 2018-06-10 17:06:38, which cannot be more than 7 days ago
EndTime	Yes	Timestamp	Query end time in the format of 2018-06-10 17:06:38
DatabaseName	No	String	Database name
OrderBy	No	String	Metric for sorting. Valid values: <code>sum_calls</code> (total number of

			calls), <code>sum_cost_time</code> (total time consumed)
OrderByType	No	String	Sorting order. desc: descending, asc: ascending
Limit	No	Integer	Number of entries returned per page. Value range: 1-100. Default value: 20.
Offset	No	Integer	Page number for data return in paged query. Pagination starts from 0

### 3. Output Parameters

Parameter Name	Type	Description
TotalCount	Integer	Number of date entries returned this time
Detail	<a href="#">SlowlogDetail</a>	Slow query log details
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Getting the slow query logs of an instance

This example shows you how to get slow query logs of the instance "postgres-apzvwncr".

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeDBSlowlogs
<Common request parameters>

{
  "EndTime": "2018-06-11 17:06:38",
  "DBInstanceId": "postgres-apzvwncr",
  "StartTime": "2018-06-10 17:06:38"
}
```



## Output Example

```
{
  "Response": {
    "TotalCount": 0,
    "Detail": {
      "TotalTime": 0.0,
      "NormalQueries": [
        {
          "UserName": "user",
          "MaxCostTime": 0.0,
          "Rows": 0,
          "CostTime": 0.0,
          "SharedReadBlks": 0,
          "Calls": 0,
          "WriteCostTime": 0,
          "ReadCostTime": 0,
          "CallsGrids": [
            0
          ],
          "NormalQuery": "select 1;",
          "MinCostTime": 0.0,
          "DatabaseName": "postgres-apzvwncr",
          "FirstTime": "2018-06-10 17:06:38",
          "LastTime": "2018-06-11 17:06:38",
          "SharedWriteBlks": 0
        }
      ],
      "TotalCalls": 0
    },
    "RequestId": "08fdf411-5d39-44f2-8e1d-a58ee60b237d"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)

- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
AuthFailure.UnauthorizedOperation	Authentication failed.
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.ESConnectError	Failed to access ES. Please try again later. If the problem persists, please contact customer service.
FailedOperation.ESQueryError	Failed to query ES. Please try again later. If the problem persists, please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
InternalServerError.InternalHttpServerError	An exception occurred while executing the request.
InternalServerError.SystemError	System error. When this error occurs, please contact customer service for assistance.
InvalidParameter	Parameter error.
InvalidParameter.ParameterCheckError	Failed to check the parameter.
InvalidParameterValue.InstanceNotExist	The current instance does not exist.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value

InvalidParameterValue.ParameterHandleError	Failed to process the parameter. Please check if the parameter value is valid.
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.InstanceAccessDeniedError	You do not have the permission to operate this resource.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.

# Account APIs

## ResetAccountPassword

最近更新时间：2023-10-13 09:43:00

### 1. API Description

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

This API is used to reset the account password of an instance.

A maximum of 100 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

### 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: ResetAccountPassword.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceId	Yes	String	Instance ID in the format of postgres-4wdeb0zv
UserName	Yes	String	Instance account name
Password	Yes	String	New password corresponding to <code>UserName</code> account

### 3. Output Parameters

Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Resetting account password for the instance "postgres-lnp6j6172" (operation failed)

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: ResetAccountPassword
<Common request parameters>

{
  "UserName": "test",
  "Password": "1234qwer()",
  "DBInstanceId": "postgres-lnp6j6172"
}
```

#### Output Example

```
{
  "Response": {
    "RequestId": "08fdf411-5d39-44f2-8e1d-a58ee60b237d",
    "Error": {
      "Message": "admin unmatched oss return failed, code:3, message:admin unmatched",
      "Code": "FailedOperation.OssOperationFailed"
    }
  }
}
```

### Example2 Resetting account password for the instance "postgres-lnp6j6172" (operation succeeded)

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: ResetAccountPassword
<Common request parameters>

{
  "UserName": "test",
  "Password": "1234qwer()",
  "DBInstanceId": "postgres-lnp6j6172"
}
```

### Output Example

```
{
  "Response": {
    "RequestId": "08fdf411-5d39-44f2-8e1d-a58ee60b237d"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
AuthFailure.UnauthorizedOperation	Authentication failed.
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
FailedOperation.OssAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.OssOperationFailed	Failed to request the backend API.
InternalError.DBError	Backend database execution error.
InternalError.InternalHttpServerError	An exception occurred while executing the request.
InternalError.SystemError	System error. When this error occurs, please contact customer service for assistance.
InvalidAccountPassword	Incorrect account password.
InvalidParameter	Parameter error.
InvalidParameterValue.AccountNotExistError	The account does not exist.
InvalidParameterValue.InstanceNotExist	The current instance does not exist.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
InvalidParameterValue.InvalidPasswordFormat	Incorrect password format.
InvalidParameterValue.InvalidPasswordLengthError	Invalid password. The password length does not meet the requirements.
InvalidParameterValue.InvalidPasswordValueError	Invalid password. The password must contain uppercase letters, lowercase letters, digits, and symbols ( <code>()~!@#\$\$%^&amp;*~+=_ {}[]:;&lt;&gt;,./</code> ), and cannot start with a slash ( <code>/</code> ).

InvalidParameterValue.ParameterHandleError	Failed to process the parameter. Please check if the parameter value is valid.
OperationDenied.CamDeniedError	This operation cannot be performed.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.



# ModifyAccountRemark

最近更新时间：2023-10-13 09:43:00

## 1. API Description

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

This API is used to modify account remarks.

A maximum of 100 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: ModifyAccountRemark.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceId	Yes	String	Instance ID in the format of postgres-4wdeb0zv
UserName	Yes	String	Instance username
Remark	Yes	String	New remarks corresponding to user <code>UserName</code>

## 3. Output Parameters

--	--	--

Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Modifying account remarks

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: ModifyAccountRemark
<Common request parameters>

{
  "UserName": "test",
  "Remark": "testModifyRemark",
  "DBInstanceId": "postgres-6bwgamo3"
}
```

#### Output Example

```
{
  "Response": {
    "RequestId": "08fdf411-5d39-44f2-8e1d-a58ee60b237d"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

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- [Tencent Cloud SDK 3.0 for Java](#)

- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
AuthFailure.UnauthorizedOperation	Authentication failed.
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
InternalServerError.InternalHttpServerError	An exception occurred while executing the request.
InvalidParameterValue.AccountNotExistError	The account does not exist.
InvalidParameterValue.InstanceNotExist	The current instance does not exist.
InvalidParameterValue.InvalidAccountFormat	Incorrect account format.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
InvalidParameterValue.ParameterCharacterError	Invalid parameter. The parameter can contain only letters, digits, underscores, and hyphens.
InvalidParameterValue.ParameterHandleError	Failed to process the parameter. Please check if the parameter value is valid.
InvalidParameterValue.ParameterLengthLimitError	The length of parameter exceeds the limit.

OperationDenied.CamDeniedError	This operation cannot be performed.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.

# DescribeAccounts

最近更新时间：2023-10-13 09:43:00

## 1. API Description

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

This API is used to query the list of the database accounts for an instance.

A maximum of 1000 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeAccounts.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceId	Yes	String	Instance ID in the format of postgres-6fego161
Limit	No	Integer	Number of entries returned per page. Default value: 10. Value range: 1-100.
Offset	No	Integer	Data offset, which starts from 0.
OrderBy	No	String	Whether to sort by creation time or username. Valid values: <code>createTime</code> (sort by creation time), <code>name</code> (sort by username)
OrderByType	No	String	Whether returns are sorted in ascending or descending order. Valid values: <code>desc</code> (descending), <code>asc</code> (ascending)

### 3. Output Parameters

Parameter Name	Type	Description
TotalCount	Integer	Number of date entries returned for this API call.
Details	Array of <a href="#">AccountInfo</a>	Account list details.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 u200cu200cu200cu200cGetting the user list for the instance "postgres-apzvwncr".

u200cu200cu200cu200cThis example shows you how to get the user list for the instance "postgres-apzvwncr".

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeAccounts
<Common request parameters>

{
  "DBInstanceId": "postgres-apzvwncr"
}
```

#### Output Example

```
{
  "Response": {
    "TotalCount": 1,
    "RequestId": "08fdf411-5d39-44f2-8e1d-a58ee60b237d",
    "Details": [
      {
        "UserName": "root",
        "Status": 2,
        "Remark": "(Test) This account is invalid",
        "DBInstanceId": "postgres-apzvwncr",
```

```
"UpdateTime": "2018-06-12 17:21:57",
"CreateTime": "2018-06-12 17:21:54"
}
]
}
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

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- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
AuthFailure.UnauthorizedOperation	Authentication failed.
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.

FailedOperation.DatabaseAffectedError	Data operation failed. Please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
InternalServerError.InternalHttpServerError	An exception occurred while executing the request.
InternalServerError.SystemError	System error. When this error occurs, please contact customer service for assistance.
InvalidParameterValue.AccountNotExist	The current account does not exist.
InvalidParameterValue.InstanceNotExist	The current instance does not exist.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
InvalidParameterValue.ParameterHandleError	Failed to process the parameter. Please check if the parameter value is valid.
OperationDenied.CamDeniedError	This operation cannot be performed.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.



# DescribeDatabases

最近更新时间：2023-10-13 09:43:00

## 1. API Description

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

This API is used to query the database list of an instance.

A maximum of 1000 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeDatabases.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceID	Yes	String	Instance ID

## 3. Output Parameters

Parameter Name	Type	Description
Items	Array of String	Database information

RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.
-----------	--------	--

## 4. Example

### Example1 Getting the list of databases

This example shows you how to get the list of databases.

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeDatabases
<Common request parameters>

{
  "DBInstanceId": "postgres-6bwgamo3"
}
```

#### Output Example

```
{
  "Response": {
    "RequestId": "86eb714c-500f-412e-8090-3b3f76843d86",
    "Items": [
      "postgres",
      "testdatabase"
    ]
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)

- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
AuthFailure.UnauthorizedOperation	Authentication failed.
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
FailedOperation.LimitOperation	Operations are not allowed on the instance.
FailedOperation.OssAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
InternalError.DBError	Backend database execution error.
InternalError.InstanceDataError	Failed to access database management service. Please contact customer service.
InternalError.InternalHttpServerError	An exception occurred while executing the request.
InternalError.SystemError	System error. When this error occurs, please contact customer service for assistance.
InvalidInstanceStatus	Incorrect instance status.

InvalidParameter	Parameter error.
InvalidParameterValue.AccountNotExistError	The account does not exist.
InvalidParameterValue.IllegalRegion	Invalid <code>Region</code> parameter.
InvalidParameterValue.InstanceNotExist	The current instance does not exist.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
InvalidParameterValue.ParameterHandleError	Failed to process the parameter. Please check if the parameter value is valid.
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.InstanceAccessDeniedError	You do not have the permission to operate this resource.
OperationDenied.InstanceStatusLimitOpError	This operation cannot be performed on an instance in this status.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.
ResourceUnavailable.InvalidInstanceStatus	Incorrect instance status.

# Specification APIs

## DescribeRegions

最近更新时间：2023-10-13 09:42:45

### 1. API Description

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

This API is used to query the purchasable regions.

A maximum of 1000 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

### 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeRegions.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.

### 3. Output Parameters

Parameter Name	Type	Description
TotalCount	Integer	Number of returned results.
RegionSet	Array of	Region information set.

	RegionInfo	
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Querying all regions

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeRegions
<Common request parameters>

{}
```

#### Output Example

```
{
  "Response": {
    "RequestId": "0872c9bb-0540-4ac4-80cf-ba63bd771b0a",
    "TotalCount": 7,
    "RegionSet": [
      {
        "Region": "ap-guangzhou",
        "RegionName": "South China (Guangzhou)",
        "RegionId": 1,
        "SupportInternational": 0,
        "RegionState": "AVAILABLE"
      },
      {
        "Region": "ap-chengdu",
        "RegionName": "Southwest China (Chengdu)",
        "RegionId": 16,
        "SupportInternational": 0,
        "RegionState": "AVAILABLE"
      },
      {
        "Region": "ap-shanghai",
        "RegionName": "East China (Shanghai)",
        "RegionId": 4,
```

```
"SupportInternational": 0,
"RegionState": "AVAILABLE"
},
{
"Region": "na-toronto",
"RegionName": "North America (Toronto)",
"RegionId": 6,
"SupportInternational": 1,
"RegionState": "UNAVAILABLE"
},
{
"Region": "ap-shanghai-fsi",
"RegionName": "East China (Shanghai Finance)",
"RegionId": 7,
"SupportInternational": 0,
"RegionState": "AVAILABLE"
},
{
"Region": "ap-beijing",
"RegionName": "North China (Beijing)",
"RegionId": 8,
"SupportInternational": 0,
"RegionState": "AVAILABLE"
},
{
"Region": "na-siliconvalley",
"RegionName": "West US (Silicon Valley)",
"RegionId": 15,
"SupportInternational": 1,
"RegionState": "AVAILABLE"
}
]
}
```

## 5. Developer Resources

### SDK

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- [Tencent Cloud SDK 3.0 for Java](#)

- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
AuthFailure.UnauthorizedOperation	Authentication failed.
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAffectedError	Data operation failed. Please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
FailedOperation.WhitelistConnectError	Failed to query the allowlist. Try again later. If the problem persists, contact customer service.
InternalServerError	Internal error.
InternalServerError.DBError	Backend database execution error.
InternalServerError.InternalHttpServerError	An exception occurred while executing the request.
InvalidParameter	Parameter error.
InvalidParameterValue.InterfaceNameNotFound	Incorrect ACTION .
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value



InvalidParameterValue.ParameterHandleError	Failed to process the parameter. Please check if the parameter value is valid.
InvalidParameterValue.RegionNotSupported	The current region is not supported.
InvalidParameterValue.StructParseFailed	An error occurred while parsing parameters.
OperationDenied.CamDeniedError	This operation cannot be performed.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.
UnsupportedOperation	The operation is not supported.

# DescribeProductConfig

最近更新时间：2023-10-13 09:42:45

## 1. API Description

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

This API is used to query the purchasable specification configuration. [u200cThis API is disused and replaced by the DescribeClasses API.](#)

A maximum of 1000 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeProductConfig.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
Zone	No	String	AZ name
DBEngine	No	String	Database engines. Valid values: 1. <code>postgresql</code> (TencentDB for PostgreSQL) 2. <code>mssql_compatible</code> (MSSQL compatible-TencentDB for PostgreSQL) Default value: <code>postgresql</code>

### 3. Output Parameters

Parameter Name	Type	Description
SpecInfoList	Array of <a href="#">SpecInfo</a>	Purchasable specification list.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Querying purchasable specifications in an AZ in a region

This example shows you how to query the purchasable specifications in Guangzhou Zone 2.

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeProductConfig
<Common request parameters>

{
  "Zone": "ap-guangzhou-2"
}
```

#### Output Example

```
{
  "Response": {
    "RequestId": "eaa0a364-08c9-42f6-888e-4e3b7e99b50d",
    "SpecInfoList": [
      {
        "Region": "ap-guangzhou",
        "Zone": "ap-guangzhou-2",
        "SupportKMSRegions": [
          "ap-guangzhou"
        ],
        "SpecItemInfoList": [
          {
```

```
"SpecCode": "cdb.pg.z1.2g",
"Version": "10.4",
"VersionName": "PostgreSQL 10",
"Cpu": 1,
"Memory": 2048,
"MaxStorage": 1000,
"MinStorage": 10,
"Qps": 2100,
"Pid": 11004,
"Type": "TS85",
"KernelVersion": "v10.4_r1.0",
"MajorVersion": "10",
"IsSupportTDE": 1
}
]
}
]
}
}
```

## 5. Developer Resources

### SDK

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- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
AuthFailure.UnauthorizedOperation	Authentication failed.
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
FailedOperation.WhitelistConnectError	Failed to query the allowlist. Try again later. If the problem persists, contact customer service.
InternalError.DBError	Backend database execution error.
InternalError.InternalHttpServerError	An exception occurred while executing the request.
InternalError.SystemError	System error. When this error occurs, please contact customer service for assistance.
InternalError.UnknownError	Unknown error. When this error occurs, please contact customer service for assistance.
InvalidParameter	Parameter error.
InvalidParameter.ParameterCheckError	Failed to check the parameter.
InvalidParameterValue.BadSpec	The instance specification to upgrade to is not purchasable.
InvalidParameterValue.IllegalZone	Invalid <code>Zone</code> parameter.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
InvalidParameterValue.ParameterHandleError	Failed to process the parameter. Please check if the parameter value is valid.
OperationDenied.CamDeniedError	This operation cannot be performed.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.

# DescribeZones

最近更新时间：2023-10-13 09:42:45

## 1. API Description

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

This API is used to query the supported AZs.

A maximum of 1000 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeZones.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.

## 3. Output Parameters

Parameter Name	Type	Description
TotalCount	Integer	Number of returned results.
ZoneSet	Array of <a href="#">ZoneInfo</a>	AZ information set.

RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.
-----------	--------	--

## 4. Example

### Example1 Querying AZs in specified region

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeZones
<Common request parameters>

{}
```

#### Output Example

```
{
  "Response": {
    "RequestId": "59c438d4-95ab-4865-993d-dc388d2660d8",
    "TotalCount": 3,
    "ZoneSet": [
      {
        "Zone": "ap-guangzhou-2",
        "ZoneName": "Guangzhou Zone 2",
        "ZoneId": 100002,
        "ZoneState": "AVAILABLE",
        "ZoneSupportIpv6": 0,
        "StandbyZoneSet": [
          "ap-guangzhou-2",
          "ap-guangzhou-3"
        ]
      },
      {
        "Zone": "ap-guangzhou-3",
        "ZoneName": "Guangzhou Zone 3",
        "ZoneId": 100003,
        "ZoneState": "AVAILABLE",
        "ZoneSupportIpv6": 0,
        "StandbyZoneSet": [
          "ap-guangzhou-2",
          "ap-guangzhou-3"
        ]
      }
    ]
  }
}
```

```
]
},
{
  "Zone": "ap-guangzhou-4",
  "ZoneName": "Guangzhou Zone 4"
  "ZoneId": 100004,
  "ZoneState": "AVAILABLE",
  "ZoneSupportIpv6": 0,
  "StandbyZoneSet": [
    "ap-guangzhou-4"
  ]
}
]
```

## 5. Developer Resources

### SDK

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- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
------------	-------------



AuthFailure.UnauthorizedOperation	Authentication failed.
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
FailedOperation.WhitelistConnectError	Failed to query the allowlist. Try again later. If the problem persists, contact customer service.
InternalError.DBError	Backend database execution error.
InternalError.InternalHttpServerError	An exception occurred while executing the request.
InternalError.SystemError	System error. When this error occurs, please contact customer service for assistance.
InternalError.UnknownError	Unknown error. When this error occurs, please contact customer service for assistance.
InvalidParameter	Parameter error.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
InvalidParameterValue.ParameterHandleError	Failed to process the parameter. Please check if the parameter value is valid.
InvalidParameterValue.RegionNotSupported	The current region is not supported.
InvalidParameterValue.StructParseFailed	An error occurred while parsing parameters.
OperationDenied.CamDeniedError	This operation cannot be performed.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.
UnsupportedOperation	The operation is not supported.

# InquiryPriceCreateDBInstances

最近更新时间：2023-10-13 09:42:45

## 1. API Description

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

This API is used to query the purchase price of an instance.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: InquiryPriceCreateDBInstances.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
Zone	Yes	String	AZ ID, which can be obtained through the <code>Zone</code> field in the returned value of the <code>DescribeZones</code> API.
SpecCode	Yes	String	Specification ID, which can be obtained through the <code>SpecCode</code> field in the returned value of the <code>DescribeClasses</code> API.
Storage	Yes	Integer	Storage capacity size in GB.
InstanceCount	Yes	Integer	Number of instances. Maximum value: 100. If you need to create more instances at a time, please contact customer service.

Period	Yes	Integer	Length of purchase in months. Currently, only 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 24, and 36 are supported.
Pid	No	Integer	[Disused] Billing ID, which can be obtained through the <code>Pid</code> field in the returned value of the <code>DescribeProductConfig</code> API.
InstanceChargeType	No	String	Instance billing type. Valid value: <code>POSTPAID_BY_HOUR</code> (pay-as-you-go)
InstanceType	No	String	Instance type. Default value: <code>primary</code> . Valid values: <code>primary</code> (dual-server high-availability, one-primary-one-standby) <code>readonly</code> (read-only instance)
DBEngine	No	String	

### 3. Output Parameters

Parameter Name	Type	Description
OriginalPrice	Integer	Published price in US Cent
Price	Integer	Discounted total amount in US Cent
Currency	String	Currency, such as USD.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Querying the purchase price of an instance

This example shows you how to query the purchase price of an instance.

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
```

```
X-TC-Action: InquiryPriceCreateDBInstances
<Common request parameters>
```

```
{
  "InstanceCount": "1",
  "Zone": "ap-guangzhou-2",
  "Storage": "100",
  "Pid": "11004",
  "Period": "1",
  "SpecCode": "cdb.pg.z1.2g",
  "InstanceChargeType": "PREPAID"
}
```

### Output Example

```
{
  "Response": {
    "RequestId": "8a61e500-aa33-454c-9ec2-da2a368c39ab",
    "OriginalPrice": 27600,
    "Price": 27600,
    "Currency": "USD"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
AuthFailure.UnauthorizedOperation	Authentication failed.
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAffectedError	Data operation failed. Please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
FailedOperation.QueryPriceFailed	Failed to query the price.
FailedOperation.QuerySpecBySpecCodeError	Failed to query specifications.
FailedOperation.TradeQueryPriceError	Failed to query pricing information. Please try again later. If the problem persists, please contact customer service.
InternalError.DBError	Backend database execution error.
InternalError.InternalHttpServerError	An exception occurred while executing the request.
InternalError.SystemError	System error. When this error occurs, please contact customer service for assistance.
InternalError.UnknownError	Unknown error. When this error occurs, please contact customer service for assistance.
InvalidParameter	Parameter error.
InvalidParameter.ParameterCheckError	Failed to check the parameter.
InvalidParameterValue.BadSpec	The instance specification to upgrade to is not purchasable.
InvalidParameterValue.IllegalInstanceChargeType	Incorrect billing mode.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value

InvalidParameterValue.InvalidZoneIdError	Invalid availability zone.
InvalidParameterValue.ParameterHandleError	Failed to process the parameter. Please check if the parameter value is valid.
InvalidParameterValue.SpecNotRecognizedError	Failed to identify the specification ({{1}}).
InvalidPid	Incorrect <code>PID</code> parameter.
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.PayModeError	Unsupported billing mode

# DescribeDBVersions

最近更新时间：2023-10-13 09:42:46

## 1. API Description

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

This API is used to query the list of supported database versions.

A maximum of 1000 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeDBVersions.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.

## 3. Output Parameters

Parameter Name	Type	Description
VersionSet	Array of <a href="#">Version</a>	List of database versions

RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.
-----------	--------	--

## 4. Example

### Example1 Querying the list of database versions

This example shows you how to query the list of valid database versions when you purchase an instance or upgrade the instance version.

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeDBVersions
<Common request parameters>

{}
```

#### Output Example

```
{
  "Response": {
    "RequestId": "99fd1cde-d477-4cb4-8a05-12b62502e6fc",
    "VersionSet": [
      {
        "AvailableUpgradeTarget": [],
        "DBEngine": "mssql_compatible",
        "DBKernelVersion": "v14.3_r1.3",
        "DBMajorVersion": "14",
        "DBVersion": "14.3",
        "Status": "AVAILABLE",
        "SupportedFeatureNames": []
      },
      {
        "AvailableUpgradeTarget": [
          "v14.3_r1.3"
        ],
        "DBEngine": "postgresql",
        "DBKernelVersion": "v14.2_r1.1",
        "DBMajorVersion": "14",
        "DBVersion": "14.2",
        "Status": "AVAILABLE",
      }
    ]
  }
}
```



```
"SupportedFeatureNames": [
  "TDE"
],
},
{
  "AvailableUpgradeTarget": [
    "v14.3_r1.3",
    "v14.2_r1.1"
  ],
  "DBEngine": "postgresql",
  "DBKernelVersion": "v14.2_r1.0",
  "DBMajorVersion": "14",
  "DBVersion": "14.2",
  "Status": "AVAILABLE",
  "SupportedFeatureNames": [
    "TDE"
  ]
}
]
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAffectedError	Data operation failed. Please contact customer service.
InvalidParameter.ParameterCheckError	Failed to check the parameter.
OperationDenied.CamDeniedError	This operation cannot be performed.

# DescribeClasses

最近更新时间：2023-10-13 09:42:46

## 1. API Description

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

This API is used to query purchasable instance specifications.

A maximum of 1000 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeClasses.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
Zone	Yes	String	AZ ID, which can be obtained through the <code>DescribeZones</code> API.
DBEngine	Yes	String	Database engines. Valid values: 1. <code>postgresql</code> (TencentDB for PostgreSQL) 2. <code>mssql_compatible</code> (MSSQL compatible-TencentDB for PostgreSQL)
DBMajorVersion	Yes	String	Major version of a database, such as 12 or 13, which can be obtained through the <code>DescribeDBVersions</code> API.

### 3. Output Parameters

Parameter Name	Type	Description
ClassInfoSet	Array of <a href="#">ClassInfo</a>	List of database specifications
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Querying the list of specifications

This example shows you how to query the list of purchasable specifications.

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeClasses
<Common request parameters>

{
  "DBEngine": "postgresql",
  "DBMajorVersion": "12",
  "Zone": "ap-guangzhou-3"
}
```

#### Output Example

```
{
  "Response": {
    "ClassInfoSet": [
      {
        "CPU": 16,
        "MaxStorage": 3000,
        "Memory": 131072,
        "MinStorage": 1000,
        "QPS": 79000,
        "SpecCode": "cdb.pg.sh1.128g"
      }
    ]
  }
}
```

```
},
{
  "CPU": 48,
  "MaxStorage": 6000,
  "Memory": 491520,
  "MinStorage": 1000,
  "QPS": 238000,
  "SpecCode": "cdb.pg.sh1.480g"
}
],
"RequestId": "012ed950-e375-4a2e-a7f8-15ec9fcd1d48"
}
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem

	persists, please contact customer service.
FailedOperation.DatabaseAffectedError	Data operation failed. Please contact customer service.
FailedOperation.WhitelistConnectError	Failed to query the allowlist. Try again later. If the problem persists, contact customer service.
InternalServerError.InternalHttpServerError	An exception occurred while executing the request.
InvalidParameter.ParameterCheckError	Failed to check the parameter.
InvalidParameterValue.InvalidZoneIdError	Invalid availability zone.
OperationDenied.CamDeniedError	This operation cannot be performed.

# InquiryPriceUpgradeDBInstance

最近更新时间：2023-10-13 09:42:44

## 1. API Description

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

This API is used to query the fees of upgrading a specified database instance. Only pay-as-you-go instance is supported.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: InquiryPriceUpgradeDBInstance.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
Storage	Yes	Integer	Instance disk size in GB
Memory	Yes	Integer	Instance memory size in GB
DBInstanceCld	Yes	String	Instance ID in the format of postgres-hez4fh0v
InstanceChargeType	No	String	Instance billing type. Valid value: <code>POSTPAID_BY_HOUR</code> (pay-as-you-go hourly)

### 3. Output Parameters

Parameter Name	Type	Description
OriginalPrice	Integer	Total cost before discount.
Price	Integer	Discounted total amount
Currency	String	Currency, such as USD.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Querying the price for upgrading an instance

##### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: InquiryPriceUpgradeDBInstance
<Common request parameters>

{
  "Storage": "500",
  "DBInstanceId": "postgres-6fego161",
  "Memory": 4
}
```

##### Output Example

```
{
  "Response": {
    "Price": 1300,
    "RequestId": "08fdf411-5d39-44f2-8e1d-a58ee60b237d",
    "OriginalPrice": 1300,
    "Currency": "CNY"
  }
}
```



## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
AuthFailure.UnauthorizedOperation	Authentication failed.
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.CdbCgwConnectError	Failed to get project information. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
FailedOperation.GetPurchaseRecordFailed	Failed to get the purchase record.
FailedOperation.QueryPriceFailed	Failed to query the price.

FailedOperation.TradeQueryPriceError	Failed to query pricing information. Please try again later. If the problem persists, please contact customer service.
InternalServerError.DBError	Backend database execution error.
InternalServerError.InternalHttpServerError	An exception occurred while executing the request.
InvalidParameter	Parameter error.
InvalidParameterValue.BadSpec	The instance specification to upgrade to is not purchasable.
InvalidParameterValue.IllegalChargeType	Unsupported billing type.
InvalidParameterValue.IllegalInstanceChargeType	Incorrect billing mode.
InvalidParameterValue.IllegalRegion	Invalid <code>Region</code> parameter.
InvalidParameterValue.IllegalZone	Invalid <code>Zone</code> parameter.
InvalidParameterValue.InstanceNotExist	The current instance does not exist.
InvalidParameterValue.InvalidInstanceVolume	The instance specification to upgrade to cannot be lower than the current instance specification.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
InvalidParameterValue.ParameterHandleError	Failed to process the parameter. Please check if the parameter value is valid.
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.InstanceAccessDeniedError	You do not have the permission to operate this resource.
OperationDenied.InstanceStatusLimitOpError	This operation cannot be performed on an instance in this status.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.
ResourceUnavailable.InvalidInstanceStatus	Incorrect instance status.

# InquiryPriceRenewDBInstance

最近更新时间：2023-10-13 09:42:45

## 1. API Description

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

This API is used to query the renewal price of an instance.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: InquiryPriceRenewDBInstance.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceId	Yes	String	Instance ID
Period	Yes	Integer	Renewal duration in months. Maximum value: 48

## 3. Output Parameters

Parameter Name	Type	Description
----------------	------	-------------

OriginalPrice	Integer	Published price in cents. For example, 24650 indicates 246.5 USD.
Price	Integer	Discounted total amount. For example, 24650 indicates 246.5 USD.
Currency	String	Currency, such as USD.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Querying the renewal price of instance "postgres-6fego161"

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: InquiryPriceRenewDBInstance
<Common request parameters>

{
  "DBInstanceId": "postgres-6fego161",
  "Period": "12"
}
```

#### Output Example

```
{
  "Response": {
    "Price": 210355,
    "RequestId": "08fdf411-5d39-44f2-8e1d-a58ee60b237d",
    "OriginalPrice": 253440,
    "Currency": "USD"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
AuthFailure.UnauthorizedOperation	Authentication failed.
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
FailedOperation.QueryPriceFailed	Failed to query the price.
FailedOperation.TradeQueryPriceError	Failed to query pricing information. Please try again later. If the problem persists, please contact customer service.
InternalServerError.DBError	Backend database execution error.
InternalServerError.InternalHttpServerError	An exception occurred while executing the request.
InvalidParameter	Parameter error.

InvalidParameter.ParameterCheckError	Failed to check the parameter.
InvalidParameterValue.BadSpec	The instance specification to upgrade to is not purchasable.
InvalidParameterValue.IllegalInstanceChargeType	Incorrect billing mode.
InvalidParameterValue.IllegalRegion	Invalid <code>Region</code> parameter.
InvalidParameterValue.InstanceNotExist	The current instance does not exist.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
InvalidParameterValue.ParameterHandleError	Failed to process the parameter. Please check if the parameter value is valid.
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.InstanceAccessDeniedError	You do not have the permission to operate this resource.
OperationDenied.InstanceStatusLimitOpError	This operation cannot be performed on an instance in this status.
OperationDenied.PostPaidPayModeError	Pay-as-you-go instances cannot be renewed.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.

# DescribeOrders

最近更新时间：2023-10-13 09:42:45

## 1. API Description

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

This API is used to query the order information.

A maximum of 1000 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeOrders.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DealNames.N	Yes	Array of String	Order name set

## 3. Output Parameters

Parameter Name	Type	Description
----------------	------	-------------

TotalCount	Integer	Number of orders
Deals	Array of PgDeal	Order array
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Querying the order information

This example shows you how to query the order information.

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeOrders
<Common request parameters>

{
  "DealNames": [
    "20180615110033"
  ]
}
```

#### Output Example

```
{
  "Response": {
    "Deals": [
      {
        "Count": 1,
        "OwnerUin": "909619400",
        "DBInstanceIdSet": [
          "postgres-2uepfuz1"
        ],
        "PayMode": 1,
        "FlowId": 36,
        "DealName": "20180615110033"
      }
    ],
  }
}
```



```
"TotalCount": 1,
"RequestId": "08fdf411-5d39-44f2-8e1d-a58ee60b237d"
}
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
AuthFailure.UnauthorizedOperation	Authentication failed.
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.

FailedOperation.QueryDealFailed	Failed to query the order information.
FailedOperation.TradeQueryOrderError	Failed to query order information. Please try again later. If the problem persists, please contact customer service.
InternalServerError.InternalHttpServerError	An exception occurred while executing the request.
InvalidParameter	Parameter error.
InvalidParameterValue.InstanceNotExist	The current instance does not exist.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
InvalidParameterValue.NullDealNames	Empty order name.
InvalidParameterValue.ParameterHandleError	Failed to process the parameter. Please check if the parameter value is valid.
OperationDenied.CamDeniedError	This operation cannot be performed.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.

# PostgreSQL for Serverless APIs

## OpenServerlessDBExtranetAccess

最近更新时间：2023-10-13 09:42:48

### 1. API Description

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

This API is used to enable the public network address of a PostgreSQL for Serverless instance.

A maximum of 100 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

### 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: OpenServerlessDBExtranetAccess.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceId	No	String	Unique ID of an instance
DBInstanceName	No	String	Instance name

### 3. Output Parameters

Parameter	Type	Description
-----------	------	-------------

Name		
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Enabling the public network access for a PostgreSQL for Serverless instance by specifying its ID

u200cu200cu200cThis example shows you how to enable the public network access for a PostgreSQL for Serverless instance by specifying its ID.

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: OpenServerlessDBExtranetAccess
<Common request parameters>

{
  "DBInstanceId": "postgres-apzvwncr"
}
```

#### Output Example

```
{
  "Response": {
    "RequestId": "08fdf411-5d39-44f2-8e1d-a58ee60b237d"
  }
}
```

### Example2 Enabling the public network access for a PostgreSQL for Serverless instance by specifying its name

u200cu200cu200cu200cThis example shows you how to enable the public network access for a PostgreSQL for Serverless instance by specifying its name.

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
```

```
Content-Type: application/json
X-TC-Action: OpenServerlessDBExtranetAccess
<Common request parameters>

{
  "DBInstanceName": "db-test"
}
```

### Output Example

```
{
  "Response": {
    "RequestId": "08fdf411-5d39-44f2-8e1d-a58ee60b237d"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

--	--

Error Code	Description
AccountNotExist	The current account does not exist.
AuthFailure.UnauthorizedOperation	Authentication failed.
DBError	Backend database execution error.
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
FailedOperation.FlowCreateError	Failed to create a task. Please try again later. If the problem persists, please contact customer service.
FailedOperation.QueryVpcFalied	Failed to get VPC details.
FlowError	Failed to create the task.
InstanceNotExist	The current instance does not exist.
InterfaceNameNotFound	<code>ACTION</code> input error.
InternalError	Internal error.
InternalError.DBError	Backend database execution error.
InternalError.FlowError	Failed to create the flow.
InternalError.InternalHttpServerError	An exception occurred while executing the request.
InternalError.SystemError	System error. When this error occurs, please contact customer service for assistance.
InternalError.UnknownError	Unknown error. When this error occurs, please contact customer service for assistance.
InternalError.VpcError	VPC error.
InvalidAccountStatus	The current account status is incorrect, so the operation is not allowed.
InvalidInstanceStatus	Incorrect instance status.

InvalidParameter	Parameter error.
InvalidParameterValue.IllegalRegion	Invalid <code>Region</code> parameter.
InvalidParameterValue.InstanceNotExist	The current instance does not exist.
InvalidParameterValue.InterfaceNameNotFound	Incorrect <code>ACTION</code> .
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
InvalidParameterValue.ParameterHandleError	Failed to process the parameter. Please check if the parameter value is valid.
InvalidParameterValue.StructParseFailed	An error occurred while parsing parameters.
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.InstanceStatusLimitOpError	This operation cannot be performed on an instance in this status.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.
ResourceUnavailable.InvalidInstanceStatus	Incorrect instance status.
ResourceUnavailable.ResourceNoPermission	No permission for the VPC.
ResourceUnavailable.VpcResourceNotFound	Failed to get the information of the VPC where the instance resides.
StructParseFailed	An error occurred while parsing parameters.
SystemError	System error. When this error occurs, please contact customer service for assistance.
UnknownError	Unknown error. When this error occurs, please contact customer service for assistance.
VpcError	VPC error

# DescribeServerlessDBInstances

最近更新时间：2023-10-13 09:42:48

## 1. API Description

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

This API is used to query the details of one or more PostgreSQL for Serverless instances.

A maximum of 1000 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeServerlessDBInstances.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
Filter.N	No	Array of <a href="#">Filter</a>	Query conditions
Limit	No	Integer	The number of queries
Offset	No	Integer	The offset value
OrderBy	No	String	Sorting metric. Currently, only "CreateTime" (instance creation time) is supported.
OrderByType	No	String	Sorting order. Ascending and descending are supported.



### 3. Output Parameters

Parameter Name	Type	Description
TotalCount	Integer	The number of query results
DBInstanceSet	Array of <a href="#">ServerlessDBInstance</a>	Query results Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Querying the list of PostgreSQL for Serverless instances

##### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeServerlessDBInstances
<Common request parameters>

{
  "Filter": [
    {
      "Name": "\"xxx\"",
    }
  ],
  "Limit": "0",
  "Offset": "1"
}
```

##### Output Example

```
{
  "Response": {
    "TotalCount": 1,
    "DBInstanceSet": [
      {
```

```
"DBInstanceId": "postgres-xxxxxxx",
"DBInstanceName": "xxx",
"DBInstanceStatus": "running",
"Region": "ap-guangzhou",
"Zone": "ap-guangzhou-3",
"ProjectId": 0,
"VpcId": "vpc-xxxxxxx",
"SubnetId": "subnet-xxxxxxx",
"DBCharset": "UTF8",
"DBVersion": "10",
"DBKernelVersion": "v10.4_r1.0",
"CreateTime": "2020-03-20 12:19:14",
"DBInstanceNetInfo": [
{
"Address": "",
"Ip": "10.10.10.111",
"Port": 5432,
"Status": "opened",
"NetType": "private"
},
{
"Address": "",
"Ip": "",
"Port": 0,
"Status": "initing",
"NetType": "public"
}
],
"DBAccountSet": [],
"DBDatabaseList": null
},
"RequestId": "d43b2a9f-070c-480b-a0bb-7c210428cfe8"
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

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- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
AuthFailure.UnauthorizedOperation	Authentication failed.
DBError	Backend database execution error.
FailedOperation.CamAuthFailed	CAM authentication failed.
FailedOperation.CamCheckResourceError	Failed to get permissions. Please try again later. If the problem persists, please contact customer service.
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAffectedError	Data operation failed. Please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
InterfaceNameNotFound	<code>ACTION</code> input error.
InternalError	Internal error.
InternalError.DBError	Backend database execution error.
InternalError.InternalHttpServerError	An exception occurred while executing the request.

InternalError.SystemError	System error. When this error occurs, please contact customer service for assistance.
InvalidParameter	Parameter error.
InvalidParameter.VpcNotFoundError	Failed to query VPC information.
InvalidParameterValue.DataConvertError	Failed to convert data format. Please contact customer service.
InvalidParameterValue.IllegalProjectId	Invalid <code>ProjectId</code> .
InvalidParameterValue.IllegalRegion	Invalid <code>Region</code> parameter.
InvalidParameterValue.InstanceNotExist	The current instance does not exist.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
InvalidParameterValue.ParameterHandleError	Failed to process the parameter. Please check if the parameter value is valid.
OperationDenied.CamDeniedError	This operation cannot be performed.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.
ResourceUnavailable.VpcResourceNotFound	Failed to get the information of the VPC where the instance resides.
StructParseFailed	An error occurred while parsing parameters.
SystemError	System error. When this error occurs, please contact customer service for assistance.
UnknownError	Unknown error. When this error occurs, please contact customer service for assistance.
UnsupportedOperation	The operation is not supported.

# DeleteServerlessDBInstance

最近更新时间：2023-10-13 09:42:48

## 1. API Description

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

This API is used to delete a PostgreSQL for Serverless instance.

A maximum of 100 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DeleteServerlessDBInstance.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceName	No	String	Instance name. Either instance name or instance ID (or both) must be passed in. If both are passed in, the instance ID will prevail.
DBInstanceID	No	String	Instance ID. Either instance name or instance ID (or both) must be passed in. If both are passed in, the instance ID will prevail.

## 3. Output Parameters

Parameter	Type	Description
-----------	------	-------------

Name		
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Deleting PostgreSQL for Serverless instance by ID

This example shows you how to delete a PostgreSQL for Serverless instance by specifying its ID, such as "postgres-xxxx".

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DeleteServerlessDBInstance
<Common request parameters>

{
  "DBInstanceId": "postgres-xxxx"
}
```

#### Output Example

```
{
  "Response": {
    "RequestId": "08fdf411-5d39-44f2-8e1d-a58ee60b237d"
  }
}
```

### Example2 Deleting PostgreSQL for Serverless instance by name

This example shows you how to delete a PostgreSQL for Serverless instance by specifying its name, such as "serverlessdb-test".

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DeleteServerlessDBInstance
```

```
<Common request parameters>
```

```
{  
  "DBInstanceName": "serverlessdb-test"  
}
```

### Output Example

```
{  
  "Response": {  
    "RequestId": "08fdf411-5d39-44f2-8e1d-a58ee60b237d"  
  }  
}
```

## 5. Developer Resources

### SDK

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- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description

AuthFailure.UnauthorizedOperation	Authentication failed.
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
FailedOperation.FlowCreateError	Failed to create a task. Please try again later. If the problem persists, please contact customer service.
InternalError	Internal error.
InternalError.DBError	Backend database execution error.
InternalError.FlowError	Failed to create the flow.
InternalError.InternalHttpServerError	An exception occurred while executing the request.
InternalError.SystemError	System error. When this error occurs, please contact customer service for assistance.
InternalError.UnknownError	Unknown error. When this error occurs, please contact customer service for assistance.
InvalidInstanceStatus	Incorrect instance status.
InvalidParameter	Parameter error.
InvalidParameterValue.InstanceNotExist	The current instance does not exist.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
InvalidParameterValue.ParameterHandleError	Failed to process the parameter. Please check if the parameter value is valid.
InvalidParameterValue.StructParseFailed	An error occurred while parsing parameters.
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.InstanceStatusLimitOpError	This operation cannot be performed on an instance in this status.
RegionNotSupported	The region is not supported.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.



ResourceUnavailable.InvalidInstanceStatus

Incorrect instance status.

# CreateServerlessDBInstance

最近更新时间：2023-10-13 09:42:48

## 1. API Description

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

This API is used to create a PostgreSQL for Serverless instance. If the creation succeeds, the instance ID will be returned.

A maximum of 100 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: CreateServerlessDBInstance.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
Zone	Yes	String	Availability zone ID. Only ap-shanghai-2, ap-beijing-1, and ap-guangzhou-2 are supported during the beta test.
DBInstanceName	Yes	String	Instance name. The value must be unique for the same account.
DBVersion	Yes	String	Kernel version of a PostgreSQL instance. Currently, only 10.4 is supported.
DBCharset	Yes	String	Database character set of a PostgreSQL instance. Currently, only UTF-8 is supported.

ProjectId	No	Integer	Project ID.
VpcId	No	String	VPC ID.
SubnetId	No	String	VPC subnet ID.
TagList.N	No	Array of <a href="#">Tag</a>	Array of tags to be bound with the instance

### 3. Output Parameters

Parameter Name	Type	Description
DBInstanceId	String	Instance ID, such as "postgres-xxxx". The value must be globally unique.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Creating PostgreSQL for Serverless instance

This example shows you how to create a PostgreSQL for Serverless 10.4 instance named "serverlessdb-test" with the UTF-8 character set used on the server.

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: CreateServerlessDBInstance
<Common request parameters>

{
  "VpcId": "vpc-xxxx",
  "Zone": "ap-guangzhou-3",
  "DBVersion": "10.4",
  "DBInstanceName": "serverlessdb-test",
  "DBCharset": "UTF8",
  "SubnetId": "subnet-xxx"
}
```

## Output Example

```
{
  "Response": {
    "RequestId": "08fdf411-5d39-44f2-8e1d-a58ee60b237d",
    "DBInstanceId": "postgres-xxxxx"
  }
}
```

## 5. Developer Resources

### SDK

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- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
AuthFailure.UnauthorizedOperation	Authentication failed.
FailedOperation.AllocateQuotasError	Failed to request a quota for resource tags.
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer

	service.
FailedOperation.CreateBasicNetworkDeniedError	Classic network creation is unsupported.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
FailedOperation.FlowCreateError	Failed to create a task. Please try again later. If the problem persists, please contact customer service.
FailedOperation.GetVpcInfoError	Failed to query VPC information. Please try again later. If the problem persists, please contact customer service.
FailedOperation.QueryVpcFailed	Failed to query VPC.
FlowError	Failed to create the task.
InternalServerError	Internal error.
InternalServerError.DBError	Backend database execution error.
InternalServerError.FlowError	Failed to create the flow.
InternalServerError.InternalHttpServerError	An exception occurred while executing the request.
InternalServerError.SystemError	System error. When this error occurs, please contact customer service for assistance.
InvalidParameter	Parameter error.
InvalidParameter.InstanceNameExist	The instance name already exists.
InvalidParameter.ParameterCheckError	Failed to check the parameter.
InvalidParameterValue.DataConvertError	Failed to convert data format. Please contact customer service.
InvalidParameterValue.IllegalRegion	Invalid <code>Region</code> parameter.
InvalidParameterValue.IllegalZone	Invalid <code>Zone</code> parameter.
InvalidParameterValue.InstanceNameExist	The account already exists.

InvalidParameterValue.InvalidAccountFormat	Incorrect account format.
InvalidParameterValue.InvalidCharset	Incorrect database character set. Currently, only <code>UTF8</code> and <code>LATIN1</code> are supported.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
InvalidParameterValue.InvalidPasswordFormat	Incorrect password format.
InvalidParameterValue.InvalidZoneIdError	Invalid availability zone.
InvalidParameterValue.ParameterCharacterError	Invalid parameter. The parameter can contain only letters, digits, underscores, and hyphens.
InvalidParameterValue.ParameterHandleError	Failed to process the parameter. Please check if the parameter value is valid.
InvalidParameterValue.ParameterLengthLimitError	The length of parameter exceeds the limit.
InvalidParameterValue.RegionNotSupported	The current region is not supported.
InvalidParameterValue.StructParseFailed	An error occurred while parsing parameters.
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.NotSupportZoneError	Serverless is not supported in this availability zone.
OperationDenied.VersionNotSupportError	Serverless is not supported on this version of PostgreSQL.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.
ResourceUnavailable.InvalidInstanceStatus	Incorrect instance status.
UnauthorizedOperation.UserHasNoRealnameAuthentication	Unverified user.

# CloseServerlessDBExtranetAccess

最近更新时间：2023-10-13 09:42:49

## 1. API Description

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

This API is used to disable the public network address of a PostgreSQL for Serverless instance.

A maximum of 100 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 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](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: CloseServerlessDBExtranetAccess.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2017-03-12.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
DBInstanceId	No	String	Unique ID of an instance
DBInstanceName	No	String	Instance name

## 3. Output Parameters

Parameter Name	Type	Description

RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.
-----------	--------	--

## 4. Example

### Example1 Disabling the public network address of a PostgreSQL for Serverless instance

u200cThis example shows you how to disable the public network address of a PostgreSQL for Serverless instance.

#### Input Example

```
POST / HTTP/1.1
Host: postgres.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: CloseServerlessDBExtranetAccess
<Common request parameters>

{
  "DBInstanceName": "test",
  "DBInstanceId": "postgres-apzvwncr"
}
```

#### Output Example

```
{
  "Response": {
    "RequestId": "08fdf411-5d39-44f2-8e1d-a58ee60b237d"
  }
}
```

## 5. Developer Resources

### SDK

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- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)



- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
AccountNotExist	The current account does not exist.
AuthFailure.UnauthorizedOperation	Authentication failed.
DBError	Backend database execution error.
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
FailedOperation.FlowCreateError	Failed to create a task. Please try again later. If the problem persists, please contact customer service.
FailedOperation.InvalidTradeOperate	Billing error. Corresponding purchase/renewal/configuration change operations are not allowed for the current instance.
FailedOperation.LimitOperation	Operations are not allowed on the instance.
FailedOperation.QueryVpcFalied	Failed to get VPC details.
FlowError	Failed to create the task.
InstanceNotExist	The current instance does not exist.
InterfaceNameNotFound	

	<code>ACTION</code> input error.
InternalError	Internal error.
InternalError.DBError	Backend database execution error.
InternalError.FlowError	Failed to create the flow.
InternalError.InternalHttpServerError	An exception occurred while executing the request.
InternalError.SystemError	System error. When this error occurs, please contact customer service for assistance.
InternalError.UnknownError	Unknown error. When this error occurs, please contact customer service for assistance.
InternalError.VpcError	VPC error.
InvalidAccountStatus	The current account status is incorrect, so the operation is not allowed.
InvalidParameter	Parameter error.
InvalidParameterValue.InstanceNotExist	The current instance does not exist.
InvalidParameterValue.InterfaceNameNotFound	Incorrect <code>ACTION</code> .
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
InvalidParameterValue.ParameterHandleError	Failed to process the parameter. Please check if the parameter value is valid.
InvalidParameterValue.StructParseFailed	An error occurred while parsing parameters.
LimitOperation	Operations are not allowed on the instance.
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.InstanceStatusLimitOpError	This operation cannot be performed on an instance in this status.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.
ResourceUnavailable.InvalidInstanceStatus	Incorrect instance status.
ResourceUnavailable.ResourceNoPermission	No permission for the VPC.
ResourceUnavailable.VpcResourceNotFound	Failed to get the information of the VPC where the instance resides.

StructParseFailed	An error occurred while parsing parameters.
SystemError	System error. When this error occurs, please contact customer service for assistance.
UnknownError	Unknown error. When this error occurs, please contact customer service for assistance.
VpcError	VPC error

# Data Types

最近更新时间：2023-10-13 09:43:00

## AccountInfo

Account information

Used by actions: DescribeAccounts.

Name	Type	Description
DBInstanceid	String	Instance ID in the format of postgres- <code>lnp6j617</code>
UserName	String	Account
Remark	String	Account remarks
Status	Integer	Account status. 1: creating, 2: normal, 3: modifying, 4: resetting password, -1: deleting
CreateTime	Timestamp	Account creation time
UpdateTime	Timestamp	Account last modified time

## AnalysisItems

Detailed analysis of a slow query statement with abstract parameter values, which is returned by the

`DescribeSlowQueryAnalysis` API

Used by actions: DescribeSlowQueryAnalysis.

Name	Type	Description
DatabaseName	String	The name of the database queried by the slow query statement
UserName	String	The name of the user who executes the slow query statement
NormalQuery	String	The slow query statement whose parameter values are abstracted
ClientAddr	String	The address of the client that executes the slow query statement
CallNum	Integer	The number of executions of the slow query statement during the specified period of time

CallPercent	Float	The ratio (in decimal form) of the number of executions of the slow query statement to that of all slow query statements during the specified period of time
CostTime	Float	The total execution time of the slow query statement during the specified period of time
CostPercent	Float	The ratio (in decimal form) of the total execution time of the slow query statement to that of all slow query statements during the specified period of time
MinCostTime	Float	The shortest execution time (in ms) of the slow query statement during the specified period of time
MaxCostTime	Float	The longest execution time (in ms) of the slow query statement during the specified period of time
AvgCostTime	Float	The average execution time (in ms) of the slow query statement during the specified period of time
FirstTime	String	The timestamp when the slow query statement starts to execute for the first time during the specified period of time
LastTime	String	The timestamp when the slow query statement starts to execute for the last time during the specified period of time

## BackupDownloadRestriction

Restriction information for downloading a backup

Used by actions: DescribeBackupDownloadURL.

Name	Type	Required	Description
RestrictionType	String	No	Type of the network restrictions for downloading backup files. Valid values: <code>NONE</code> (backups can be downloaded over both private and public networks), <code>INTRANET</code> (backups can only be downloaded over the private network), <code>CUSTOMIZE</code> (backups can be downloaded over specified VPCs or at specified IPs).
VpcRestrictionEffect	String	No	Whether VPC is allowed. Valid values: <code>ALLOW</code> (allow), <code>DENY</code> (deny).
VpcIdSet	Array of String	No	Whether it is allowed to download the VPC ID list of the backup files.

IpRestrictionEffect	String	No	Whether IP is allowed. Valid values: <code>ALLOW</code> (allow), <code>DENY</code> (deny).
IpSet	Array of String	No	Whether it is allowed to download IP list of the backup files.

## BackupPlan

Backup plan

Used by actions: DescribeBackupPlans.

Name	Type	Description
BackupPeriod	String	Backup cycle
BaseBackupRetentionPeriod	Integer	Retention period of basic backups
MinBackupStartTime	String	The earliest time to start a backup
MaxBackupStartTime	String	The latest time to start a backup

## BackupSummary

Instance backup statistics

Used by actions: DescribeBackupSummaries.

Name	Type	Description
DBInstanceId	String	Instance ID
LogBackupCount	Integer	Number of log backups of an instance
LogBackupSize	Integer	Size of log backups of an instance
ManualBaseBackupCount	Integer	Number of manually created full backups of an instance
ManualBaseBackupSize	Integer	Size of manually created full backups of an instance
AutoBaseBackupCount	Integer	Number of automatically created full backups of an instance

AutoBaseBackupSize	Integer	Size of automatically created full backups of an instance
TotalBackupCount	Integer	Total number of backups
TotalBackupSize	Integer	Total backup size

## BaseBackup

Full backup information of a database

Used by actions: DescribeBaseBackups.

Name	Type	Description
DBInstanceId	String	Instance ID
Id	String	Unique ID of a backup file
Name	String	Backup file name.
BackupMethod	String	Backup method, including physical and logical.
BackupMode	String	Backup mode, including automatic and manual.
State	String	Backup task status
Size	Integer	Backup set size in bytes
StartTime	String	Backup start time
FinishTime	String	Backup end time
ExpireTime	String	Backup expiration time

## ClassInfo

Database instance specification

Used by actions: DescribeClasses.

Name	Type	Description
SpecCode	String	Specification ID
CPU	Integer	Number of CPU cores

Memory	Integer	Memory size in MB
MaxStorage	Integer	Maximum storage capacity in GB supported by this specification
MinStorage	Integer	Minimum storage capacity in GB supported by this specification
QPS	Integer	Estimated QPS for this specification

## DBBackup

Database backup information

Used by actions: DescribeDBBackups.

Name	Type	Description
Id	Integer	Unique backup file ID
StartTime	String	File generation start time
EndTime	String	File generation end time
Size	Integer	File size in KB
Strategy	Integer	Policy (0: instance backup, 1: multi-database backup)
Way	Integer	Type (0: scheduled)
Type	Integer	Backup mode (1: full)
Status	Integer	Status (1: creating, 2: success, 3: failure)
DbList	Array of String	DB list
InternalAddr	String	Download address on private network
ExternalAddr	String	Download address on public network
SetId	String	Backup set ID Note: this field may return <code>null</code> , indicating that no valid values can be obtained.

## DBInstance



## Instance details

Used by actions: DescribeDBInstanceAttribute, DescribeDBInstances, DescribeReadOnlyGroups.

Name	Type	Description
Region	String	Instance region such as ap-guangzhou, which corresponds to the <code>Region</code> field in <code>RegionSet</code> .
Zone	String	Instance AZ such as ap-guangzhou-3, which corresponds to the <code>Zone</code> field of <code>ZoneSet</code> .
VpcId	String	VPC ID in the format of <code>vpc-xxxxxxx</code> , which can be obtained in the console or from the <code>unVpcId</code> field in the return value of the <a href="#">DescribeVpcEx</a> API.
SubnetId	String	VPC subnet ID in the format of <code>subnet-xxxxxxxx</code> , which can be obtained in the console or from the <code>unSubnetId</code> field in the return value of the <a href="#">DescribeSubnets</a> API.
DBInstanceId	String	Instance ID
DBInstanceName	String	Instance name
DBInstanceStatus	String	Instance status. Valid values: <code>applying</code> , <code>init</code> (to be initializing), <code>initializing</code> (initializing), <code>running</code> , <code>limited run</code> , <code>isolating</code> , <code>isolated</code> , <code>recycling</code> , <code>recycled</code> , <code>running</code> , <code>offline</code> , <code>migrating</code> , <code>expanding</code> , <code>waitSwitch</code> (waiting for switch), <code>switching</code> , <code>readonly</code> , <code>restarting</code> , <code>network changing</code> , <code>upgrading</code> (upgrading kernel version), <code>audit-switching</code> (changing audit status), <code>primary-switching</code> (primary-standby switching).
DBInstanceMemory	Integer	Assigned instance memory size in GB
DBInstanceStorage	Integer	Assigned instance storage capacity in GB
DBInstanceCpu	Integer	Number of assigned CPUs
DBInstanceClass	String	Purchasable specification ID
DBMajorVersion	String	The major PostgreSQL version number, which can be queried by the <a href="#">DescribeDBVersions</a> API. Valid values: <code>10</code> , <code>11</code> , <code>12</code> , <code>13</code> , <code>14</code> , <code>15</code> . Note: This field may return null, indicating that no valid value can be obtained.

DBVersion	String	Number of the major PostgreSQL community version and minor such as 12.4, which can be queried by the <a href="#">DescribeDBVersions</a>
DBKernelVersion	String	PostgreSQL kernel version number (like v12.7_r1.8), which can be queried by the <a href="#">DescribeDBVersions</a> API. Note: This field may return null, indicating that no valid value can be obtained.
DBInstanceType	String	Instance type. Valid values: <ul style="list-style-type: none"> <li><code>primary</code> : Primary instance</li> <li><code>readonly</code> : Read-only instance</li> <li><code>guard</code> : Disaster recovery instance</li> <li><code>temp</code> : Temp instance</li> </ul>
DBInstanceVersion	String	Instance version. Valid value: <code>standard</code> (dual-server high-availability; one-primary-one-standby).
DBCharset	String	Instance character set. Valid values: <ul style="list-style-type: none"> <li><code>UTF8</code></li> <li><code>LATIN1</code></li> </ul>
CreateTime	Timestamp	Instance creation time
UpdateTime	Timestamp	Last updated time of the instance attribute
ExpireTime	Timestamp	Instance expiration time
IsolatedTime	Timestamp	Instance isolation time
PayType	String	Billing mode. Valid values: <ul style="list-style-type: none"> <li><code>PREPAID</code> : Monthly subscription</li> <li><code>postpaid</code> : Pay-as-you-go</li> </ul>
AutoRenew	Integer	Whether auto-renewal is enabled. Valid values: <ul style="list-style-type: none"> <li><code>0</code> : Manual renewal.</li> <li><code>1</code> : Automatic renewal.</li> </ul> Default value: <code>0</code> .
DBInstanceNetInfo	Array of <a href="#">DBInstanceNetInfo</a>	Instance network connection information
Type	String	Machine type
AppId	Integer	User <code>AppId</code>
Uid	Integer	Instance <code>Uid</code>

ProjectId	Integer	Project ID
TagList	Array of <a href="#">Tag</a>	The information of tags associated with instances Note: This field may return null, indicating that no valid value can be obtained.
MasterDBInstanceId	String	Primary instance information, which is returned only when the instance is read-only. Note: This field may return null, indicating that no valid value can be obtained.
ReadOnlyInstanceNum	Integer	Number of read-only instances Note: This field may return null, indicating that no valid value can be obtained.
StatusInReadOnlyGroup	String	The status of a read-only instance in a read-only group Note: This field may return null, indicating that no valid value can be obtained.
OfflineTime	String	Offline time Note: This field may return null, indicating that no valid value can be obtained.
DBNodeSet	Array of <a href="#">DBNode</a>	Instance node information Note: This field may return null, indicating that no valid value can be obtained.
IsSupportTDE	Integer	Whether the instance supports TDE. Valid values: <ul style="list-style-type: none"> <li>0 : No.</li> <li>1 : Yes.</li> </ul> Default value: 0 . For more information, see <a href="#">TDE</a> . Note: This field may return null, indicating that no valid value can be obtained.
DBEngine	String	Database engines. Valid values: <ul style="list-style-type: none"> <li>postgresql : TencentDB for PostgreSQL</li> <li>mssql_compatible : MSSQL compatible-TencentDB for PostgreSQL</li> </ul> Default value: postgresql . Note: This field may return null, indicating that no valid value can be obtained.
DBEngineConfig	String	Configuration information of database engine in the following format: {"\$key1": "\$value1", "\$key2": "\$value2"} Valid values: mssql_compatible engine:

- migrationMode** : Database mode. Valid values: `single` (single-database mode), `multi-db` (multi-database mode). value: `single-db` .
- defaultLocale** : Default locale, which can't be modified initialization. Default value: `en_US` . Valid values:
   
`"af_ZA", "sq_AL", "ar_DZ", "ar_BH", "ar_EG", "ar_IQ", "ar_JO", "ar_KW", "ar_LB", "ar_LY", "ar_MA", "ar_OM", "ar_QA", "ar_SA", "ar_SY", "ar_TN", "ar_AE", "ar_YE", "hy_AM", "az_Cyrl_AZ", "az_Latn_AZ", "eu_ES", "be_BY", "bg_BG", "ca_ES", "zh_HK", "zh_MO", "zh_CN", "zh_SG", "zh_TW", "hr_HR", "cs_CZ", "da_NL_BE", "nl_NL", "en_AU", "en_BZ", "en_CA", "en_IE", "en_JM", "en_NZ", "en_PH", "en_ZA", "en_TT", "en_GB", "en_US", "en_Z", "et_EE", "fo_FO", "fa_IR", "fi_FI", "fr_BE", "fr_CA", "fr_FR", "fr_L", "fr_MC", "fr_CH", "mk_MK", "ka_GE", "de_AT", "de_DE", "de_L", "de_LU", "de_CH", "el_GR", "gu_IN", "he_IL", "hi_IN", "hu_HU", "id_ID", "it_IT", "it_CH", "ja_JP", "kn_IN", "kok_IN", "ko_KR", "k", "lv_LV", "lt_LT", "ms_BN", "ms_MY", "mr_IN", "mn_MN", "nb_N", "nn_NO", "pl_PL", "pt_BR", "pt_PT", "pa_IN", "ro_RO", "ru_RU", "sa_IN", "sr_Cyrl_RS", "sr_Latn_RS", "sk_SK", "sl_SI", "es_AR", "es_BO", "es_CL", "es_CO", "es_CR", "es_DO", "es_EC", "es_ξ", "es_GT", "es_HN", "es_MX", "es_NI", "es_PA", "es_PY", "es_PE", "es_PR", "es_ES", "es_TRADITIONAL", "es_UY", "es_VE", "sw", "sv_FI", "sv_SE", "tt_RU", "te_IN", "th_TH", "tr_TR", "uk_UA", "t", "ur_PK", "uz_Cyrl_UZ", "uz_Latn_UZ", "vi_VN".`
- serverCollationName** : Default collation name, which modified after the initialization. Default value: `"sql_latin1_general_cp1_ci_as"`. Valid values:
   
`"bbf_unicode_cp1_ci_as", "bbf_unicode_CP1250_ci_as", "bbf_unicode_CP1251_ci_as", "bbf_unicode_cp1253_ci_as", "bbf_unicode_cp1254_ci_as", "bbf_unicode_cp1255_ci_as", "bbf_unicode_cp1256_ci_as", "bbf_unicode_cp1257_ci_as", "bbf_unicode_cp1258_ci_as", "bbf_unicode_cp874_ci_as", "sql_latin1_general_cp1250_ci_as", "sql_latin1_general_cp1251_ci_as", "sql_latin1_general_cp1_c", "sql_latin1_general_cp1253_ci_as", "sql_latin1_general_cp1254_ci_as", "sql_latin1_general_cp1255_ci_as", "sql_latin1_general_cp125", "sql_latin1_general_cp1257_ci_as", "sql_latin1_general_cp1258_ci_as", "chinese_prc_ci_as", "cyrillic_general_ci_as", "finnish_swedish_ci_as", "french_ci_as", "japanese_ci_as", "korean_wansung_ci_as", "latin1_general_ci", "modern_spanish_ci_as", "polish_ci_as", "thai_ci_as", "traditional_spanish_ci_as", "turkish_ci_as", "ukrainian_ci_as", "vietnamese_ci_as".`

		Note: u200dThis field may return null, indicating that no valid va be obtained.
NetworkAccessList	Array of <a href="#">NetworkAccess</a>	Network access list of the instance (this field has been deprecat Note: this field may return <code>null</code> , indicating that no valid value be obtained.
SupportIpv6	Integer	Whether the instance supports IPv6. Valid values: <ul style="list-style-type: none"> <li><code>0</code> : No.</li> <li><code>1</code> : Yes.</li> </ul> Default value: <code>0</code> .

## DBInstanceNetInfo

Instance network connection information

Used by actions: DescribeDBInstanceAttribute, DescribeDBInstances, DescribeReadOnlyGroups.

Name	Type	Description
Address	String	DNS domain name
Ip	String	Ip
Port	Integer	Connection port address
NetType	String	Network type. 1: inner (private network address), 2: public (public network address)
Status	String	Network connection status. Valid values: <code>initing</code> (never enabled before), <code>opened</code> (enabled), <code>closed</code> (disabled), <code>opening</code> (enabling), <code>closing</code> (disabling)
VpcId	String	VPC ID Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
SubnetId	String	Subnet ID Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
ProtocolType	String	Database connection protocol type. Valid values: <code>postgresql</code> , <code>mssql</code> (MSSQL-compatible) Note: This field may return null, indicating that no valid values can be obtained.

## DBNode

Instance node information including node type and AZ.

Used by actions: CloneDBInstance, CreateInstances, DescribeDBInstanceAttribute, DescribeDBInstances, DescribeReadOnlyGroups, ModifyDBInstanceDeployment.

Name	Type	Required	Description
Role	String	Yes	Node type. Valid values: Primary ; Standby .
Zone	String	Yes	AZ where the node resides, such as ap-guangzhou-1.

## Detail

Details returned by the `DescribeSlowQueryAnalysis` API

Used by actions: DescribeSlowQueryAnalysis.

Name	Type	Description
TotalTime	Float	The total execution time (in ms) of all slow query statements during the specified period of time
TotalCallNum	Integer	The total number of all slow query statements during the specified period of time
AnalysisItems	Array of <a href="#">AnalysisItems</a>	The statistical analysis list of slow queries Note: this field may return <code>null</code> , indicating that no valid values can be obtained.

## DurationAnalysis

Analyze the execution time of slow query statements by classifying them to different time ranges

Used by actions: DescribeSlowQueryList.

Name	Type	Description
TimeSegment	String	Time range
Count	Integer	The number of slow query statements whose execution time falls within the time range

## EncryptionKey

KMS key information

Used by actions: DescribeEncryptionKeys.

Name	Type	Description
KeyId	String	Encrypted KeyId of KMS instance Note: This field may return <code>null</code> , indicating that no valid value can be obtained.
KeyAlias	String	Encryption key alias of KMS instance Note: This field may return <code>null</code> , indicating that no valid value can be obtained.
DEKCipherTextBlob	String	Instance DEK ciphertext Note: This field may return <code>null</code> , indicating that no valid value can be obtained.
IsEnabled	Integer	Whether the key is enabled. Valid values: <code>1</code> (yes), <code>0</code> (no) Note: This field may return <code>null</code> , indicating that no valid value can be obtained.
KeyRegion	String	Region where KMS key resides Note: This field may return <code>null</code> , indicating that no valid value can be obtained.
CreateTime	String	DEK key creation time Note: This field may return <code>null</code> , indicating that no valid value can be obtained.

## ErrLogDetail

Error log details

Used by actions: DescribeDBErrlogs.

Name	Type	Description
UserName	String	Username
Database	String	Database name
ErrTime	String	Error occurrence time

ErrMsg	String	Error message
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## EventInfo

Parameter modification event information

Used by actions: DescribeParamsEvent.

Name	Type	Description
ParamName	String	Parameter name Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
OldValue	String	Original parameter value Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
NewValue	String	New parameter value in this modification event Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
ModifyTime	String	Start time of parameter modification Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
EffectiveTime	String	Start time when the modified parameter takes effect Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
State	String	Modification status Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
Operator	String	Operator (generally, the value is the UIN of a sub-user) Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
EventLog	String	Event log Note: this field may return <code>null</code> , indicating that no valid values can be obtained.

## EventItem

Modification details of one parameter

Used by actions: DescribeParamsEvent.

Name	Type	Description
ParamName	String	Parameter name



		Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
EventCount	Integer	The number of modification events Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
EventDetail	Array of <a href="#">EventInfo</a>	Modification event details Note: this field may return <code>null</code> , indicating that no valid values can be obtained.

## Filter

Key-value pair filter for conditional filtering queries, such as filter ID and name

- If more than one filter exists, the logical relationship between these filters is `AND` .
- If multiple values exist in one filter, the logical relationship between these values is `OR` .

Used by actions: DescribeBackupSummaries, DescribeBaseBackups, DescribeDBInstances, DescribeLogBackups, DescribeParameterTemplates, DescribeReadOnlyGroups, DescribeServerlessDBInstances.

Name	Type	Required	Description
Name	String	No	Filter name.
Values	Array of String	No	One or more filter values.

## LogBackup

Log backup information of a database

Used by actions: DescribeLogBackups.

Name	Type	Description
DBInstanceid	String	Instance ID
Id	String	Unique ID of a backup file
Name	String	Backup file name
BackupMethod	String	Backup method, including physical and logical.

BackupMode	String	Backup mode, including automatic and manual.
State	String	Backup task status
Size	Integer	Backup set size in bytes
StartTime	String	Backup start time
FinishTime	String	Backup end time
ExpireTime	String	Backup expiration time

## NetworkAccess

Network information. (This parameter structure has been deprecated. Please use `DBInstanceNetInfo` to query network information.)

Used by actions: DescribeDBInstanceAttribute, DescribeDBInstances, DescribeReadOnlyGroups.

Name	Type	Description
ResourceId	String	Network resource ID, instance ID, or RO group ID Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
ResourceType	Integer	Resource type. Valid values: <code>1</code> (instance), <code>2</code> (RO group) Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
VpcId	String	VPC ID Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
Vip	String	IPv4 address Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
Vip6	String	IPv6 address Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
Vport	Integer	Access port Note: this field may return <code>null</code> , indicating that no valid values can be obtained.

SubnetId	String	Subnet ID Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
VpcStatus	Integer	Network status. Valid values: <code>1</code> (applying), <code>2</code> (in use), <code>3</code> (deleting), <code>4</code> (deleted) Note: this field may return <code>null</code> , indicating that no valid values can be obtained.

## NormalQueryItem

Information of one SlowQuery

Used by actions: DescribeDBSlowlogs.

Name	Type	Description
UserName	String	Username
Calls	Integer	Number of calls
CallsGrids	Array of Integer	Granularity
CostTime	Float	Total time consumed
Rows	Integer	Number of affected rows
MinCostTime	Float	Minimum time consumed
MaxCostTime	Float	Maximum time consumed
FirstTime	String	Time of the earliest slow SQL statement
LastTime	String	Time of the latest slow SQL statement
SharedReadBlks	Integer	Shared memory blocks for reads
SharedWriteBlks	Integer	Shared memory blocks for writes
ReadCostTime	Integer	Total IO read time
WriteCostTime	Integer	Total IO write time
DatabaseName	String	Database name
NormalQuery	String	Slow SQL statement after desensitization

## ParamEntry

Parameters to be modified in batches

Used by actions: ModifyDBInstanceParameters, ModifyParameterTemplate.

Name	Type	Required	Description
Name	String	Yes	Parameter name
ExpectedValue	String	Yes	The new value to which the parameter will be modified. When this parameter is used as an input parameter, its value must be a string, such as <code>0.1</code> (decimal), <code>1000</code> (integer), and <code>replica</code> (enum).

## ParamInfo

Parameter details

Used by actions: DescribeDBInstanceParameters, DescribeDefaultParameters, DescribeParameterTemplateAttributes.

Name	Type	Description
ID	Integer	Parameter ID Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
Name	String	Parameter name Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
ParamValueType	String	Value type of the parameter. Valid values: <code>integer</code> , <code>real</code> (floating-point), <code>bool</code> , <code>enum</code> , <code>mutil_enum</code> (this type of parameter can be set to multiple enumerated values). For an <code>integer</code> or <code>real</code> parameter, the <code>Min</code> field represents the minimum value and the <code>Max</code> field the maximum value. For a <code>bool</code> parameter, the valid values include <code>true</code> and <code>false</code> ; For an <code>enum</code> or <code>mutil_enum</code> parameter, the <code>EnumValue</code> field represents the valid values.

		Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
Unit	String	Unit of the parameter value. If the parameter has no unit, this field will return null. Note: This field may return null, indicating that no valid values can be obtained.
DefaultValue	String	Default value of the parameter, which is returned as a string Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
CurrentValue	String	Current value of the parameter, which is returned as a string Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
Max	Float	The maximum value of the <code>integer</code> or <code>real</code> parameter Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
EnumValue	Array of String	Value range of the enum parameter Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
Min	Float	The minimum value of the <code>integer</code> or <code>real</code> parameter Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
ParamDescriptionCH	String	Parameter description in Chinese Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
ParamDescriptionEN	String	Parameter description in English Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
NeedReboot	Boolean	Whether to restart the instance for the modified parameter to take effect. Valid values: <code>true</code> (yes), <code>false</code> (no) Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
ClassificationCN	String	Parameter category in Chinese Note: this field may return <code>null</code> , indicating that no valid values can be obtained.

ClassificationEN	String	Parameter category in English Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
SpecRelated	Boolean	Whether the parameter is related to specifications. Valid values: <code>true</code> (yes), <code>false</code> (no) Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
Advanced	Boolean	Whether it is a key parameter. Valid values: <code>true</code> (yes, and modifying it may affect instance performance), <code>false</code> (no) Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
LastModifyTime	String	The last modified time of the parameter Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
StandbyRelated	Integer	Primary-standby constraint. Valid values: <code>0</code> (no constraint), <code>1</code> (The parameter value of the standby server must be greater than that of the primary server), <code>2</code> (The parameter value of the primary server must be greater than that of the standby server.) Note: This field may return null, indicating that no valid values can be obtained.
VersionRelationSet	Array of <a href="#">ParamVersionRelation</a>	Associated parameter version information, which refers to the detailed parameter information of the kernel version. Note: This field may return null, indicating that no valid values can be obtained.
SpecRelationSet	Array of <a href="#">ParamSpecRelation</a>	Associated parameter specification information, which refers to the detailed parameter information of the specifications. Note: This field may return null, indicating that no valid values can be obtained.

## ParamSpecRelation

Parameter information of each specification

Used by actions: DescribeDBInstanceParameters, DescribeDefaultParameters, DescribeParameterTemplateAttributes.

Name	Type	Description
Name	String	Parameter name Note: This field may return null, indicating that no valid values can be obtained.
Memory	String	The specification that corresponds to the parameter information Note: This field may return null, indicating that no valid values can be obtained.
Value	String	The default parameter value under this specification Note: This field may return null, indicating that no valid values can be obtained.
Unit	String	Unit of the parameter value. If the parameter has no unit, this field will return null. Note: This field may return null, indicating that no valid values can be obtained.
Max	Float	The maximum value of the <code>integer</code> or <code>real</code> parameter Note: This field may return null, indicating that no valid values can be obtained.
Min	Float	The minimum value of the <code>integer</code> or <code>real</code> parameter Note: This field may return null, indicating that no valid values can be obtained.
EnumValue	Array of String	Value range of the enum parameter Note: This field may return null, indicating that no valid values can be obtained.

## ParamVersionRelation

Parameter information of each version

Used by actions: DescribeDBInstanceParameters, DescribeDefaultParameters, DescribeParameterTemplateAttributes.

Name	Type	Description
Name	String	Parameter name Note: This field may return null, indicating that no valid values can be obtained.
DBKernelVersion	String	The kernel version that corresponds to the parameter information Note: This field may return null, indicating that no valid values can be obtained.
Value	String	Default parameter value under the kernel version and specification of the instance Note: This field may return null, indicating that no valid values can be obtained.

Unit	String	Unit of the parameter value. If the parameter has no unit, this field will return null. Note: This field may return null, indicating that no valid values can be obtained.
Max	Float	The maximum value of the <code>integer</code> or <code>real</code> parameter Note: This field may return null, indicating that no valid values can be obtained.
Min	Float	The minimum value of the <code>integer</code> or <code>real</code> parameter Note: This field may return null, indicating that no valid values can be obtained.
EnumValue	Array of String	Value range of the enum parameter Note: This field may return null, indicating that no valid values can be obtained.

## ParameterTemplate

Basic information of a parameter template

Used by actions: DescribeParameterTemplates.

Name	Type	Description
TemplateId	String	Parameter template ID
TemplateName	String	Parameter template name
DBMajorVersion	String	Database version applicable to a parameter template
DBEngine	String	Database engine applicable to a parameter template
TemplateDescription	String	Parameter template description

## PgDeal

Order details

Used by actions: DescribeOrders.

Name	Type	Description



DealName	String	Order name
OwnerUin	String	User
Count	Integer	Number of instances involved in order
PayMode	Integer	Billing mode. 0: pay-as-you-go
FlowId	Integer	Async task flow ID
DBInstanceIdsSet	Array of String	Instance ID array

## PolicyRule

Rule information for security group

Used by actions: DescribeDBInstanceSecurityGroups.

Name	Type	Description
Action	String	Policy, Valid values: <code>ACCEPT</code> , <code>DROP</code> .
CidrIp	String	Source or destination IP or IP range, such as 172.16.0.0/12.
PortRange	String	Port
IpProtocol	String	Network protocol. UDP and TCP are supported.
Description	String	The rule description

## RawSlowQuery

The list of slow query details returned by the `DescribeSlowQueryList` API

Used by actions: DescribeSlowQueryList.

Name	Type	Description
RawQuery	String	Slow query statement
DatabaseName	String	The database queried by the slow query statement
Duration	Float	The execution time of the slow query statement
ClientAddr	String	The client that executes the slow query statement

UserName	String	The name of the user who executes the slow query statement
SessionStartTime	String	The time when the slow query statement starts to execute

## ReadOnlyGroup

RO group information

Used by actions: DescribeReadOnlyGroups.

Name	Type	Description
ReadOnlyGroupId	String	RO group identifier Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
ReadOnlyGroupName	String	RO group name Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
ProjectId	Integer	Project ID Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
MasterDBInstanceId	String	Primary instance ID Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
MinDelayEliminateReserve	Integer	The minimum number of read-only replicas that must be retained in an RO group Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
MaxReplayLatency	Integer	Delayed log size threshold
ReplayLatencyEliminate	Integer	Whether to remove a read-only replica from an RO group if the sync log size difference between the read-only replica and the primary instance exceeds the threshold. Valid values: <code>0</code> (no), <code>1</code> (yes).
MaxReplayLag	Float	Delay threshold
ReplayLagEliminate	Integer	Whether to remove a read-only replica from an RO group if the delay between the read-only replica and the primary

		instance exceeds the threshold. Valid values: <code>0</code> (no), <code>1</code> (yes).
VpcId	String	VPC ID
SubnetId	String	Subnet ID Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
Region	String	Region ID
Zone	String	Availability zone ID
Status	String	Status
ReadOnlyDBInstanceList	Array of <a href="#">DBInstance</a>	Instance details
Rebalance	Integer	Whether to enable automatic load balancing
DBInstanceNetInfo	Array of <a href="#">DBInstanceNetInfo</a>	Network information
NetworkAccessList	Array of <a href="#">NetworkAccess</a>	Network access list of the RO group (this field has been deprecated) Note: this field may return <code>null</code> , indicating that no valid values can be obtained.

## RegionInfo

Region information such as number and status

Used by actions: DescribeRegions.

Name	Type	Description
Region	String	Region abbreviation
RegionName	String	Region name
RegionId	Integer	Region number
RegionState	String	Availability status. UNAVAILABLE: unavailable, AVAILABLE: available
SupportInternational	Integer	Whether the resource can be purchased in this region. Valid values: <code>0</code> (no), <code>1</code> (yes).

Note: this field may return `null` , indicating that no valid values can be obtained.

## SecurityGroup

Security group information

Used by actions: DescribeDBInstanceSecurityGroups.

Name	Type	Description
ProjectId	Integer	Project ID
CreateTime	String	Creation time
Inbound	Array of <a href="#">PolicyRule</a>	Inbound rule
Outbound	Array of <a href="#">PolicyRule</a>	Outbound rule
SecurityGroupId	String	Security group ID
SecurityGroupName	String	Security group name
SecurityGroupDescription	String	Security group remarks

## ServerlessDBAccount

PostgreSQL for Serverless instance account description

Used by actions: DescribeServerlessDBInstances.

Name	Type	Description
DBUser	String	Username Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
DBPassword	String	Password Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
DBConnLimit	Integer	The maximum number of connections Note: this field may return <code>null</code> , indicating that no valid values can be obtained.

## ServerlessDBInstance

PostgreSQL for Serverless instance description

Used by actions: DescribeServerlessDBInstances.

Name	Type	Required	Description
DBInstanceCld	String	No	Instance ID, which is the unique identifier Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
DBInstanceName	String	No	Instance name Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
DBInstanceStatus	String	No	Instance status Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
Region	String	No	Region Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
Zone	String	No	Availability zone Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
ProjectId	Integer	No	Project ID Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
VpCId	String	No	VPC ID Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
SubnetId	String	No	Subnet ID Note: this field may return <code>null</code> ,

			indicating that no valid values can be obtained.
DBCharset	String	No	Character set Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
DBVersion	String	No	Database version Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
CreateTime	String	No	Creation time Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
DBInstanceNetInfo	Array of <a href="#">ServerlessDBInstanceNetInfo</a>	No	Instance network information Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
DBAccountSet	Array of <a href="#">ServerlessDBAccount</a>	No	Instance account information Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
DBDatabaseList	Array of String	No	Information of the databases in an instance Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
TagList	Array of <a href="#">Tag</a>	No	The array of tags bound to an instance Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
DBKernelVersion	String	No	Database kernel version Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
DBMajorVersion	String	No	Database major version number Note: this field may return <code>null</code> ,

indicating that no valid values can be obtained.

## ServerlessDBInstanceNetInfo

PostgreSQL for Serverless instance network description

Used by actions: DescribeServerlessDBInstances.

Name	Type	Description
Address	String	Address Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
Ip	String	IP address Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
Port	Integer	Port number Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
Status	String	Status Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
NetType	String	Network type Note: this field may return <code>null</code> , indicating that no valid values can be obtained.

## SlowlogDetail

Slow query details

Used by actions: DescribeDBSlowlogs.

Name	Type	Description
TotalTime	Float	Total time consumed
TotalCalls	Integer	Total number of calls
NormalQueries	Array of <a href="#">NormalQueryItem</a>	List of slow SQL statements after desensitization

## SpecInfo

Purchasable specification details in an AZ in a region.

Used by actions: DescribeProductConfig.

Name	Type	Description
Region	String	Region abbreviation, which corresponds to the <code>Region</code> field of <code>RegionSet</code>
Zone	String	AZ abbreviate, which corresponds to the <code>Zone</code> field of <code>ZoneSet</code>
SpecItemInfoList	Array of <a href="#">SpecItemInfo</a>	Specification details list
SupportKMSRegions	Array of String	Regions where KMS is supported Note: This field may return <code>null</code> , indicating that no valid value was found.

## SpecItemInfo

Specification description

Used by actions: DescribeProductConfig.

Name	Type	Description
SpecCode	String	Specification ID
Version	String	PostgreSQL version number
VersionName	String	Full version name corresponding to kernel number
Cpu	Integer	Number of CPU cores
Memory	Integer	Memory size in MB
MaxStorage	Integer	Maximum storage capacity in GB supported by this specification
MinStorage	Integer	Minimum storage capacity in GB supported by this specification
Qps	Integer	Estimated QPS for this specification
Pid	Integer	(Disused)
Type	String	Machine type



MajorVersion	String	PostgreSQL major version number Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
KernelVersion	String	PostgreSQL kernel version number Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
IsSupportTDE	Integer	Whether TDE data encryption is supported. Valid values: 0 (no), 1 (yes) Note: This field may return <code>null</code> , indicating that no valid value was found.

## Tag

The information of tags associated with instances, including `TagKey` and `TagValue`

Used by actions: CloneDBInstance, CreateDBInstances, CreateInstances, CreateReadOnlyDBInstance, CreateServerlessDBInstance, DescribeDBInstanceAttribute, DescribeDBInstances, DescribeReadOnlyGroups, DescribeServerlessDBInstances.

Name	Type	Required	Description
TagKey	String	Yes	Tag key
TagValue	String	Yes	Tag value

## Version

Database version information

Used by actions: DescribeDBVersions.

Name	Type	Description
DBEngine	String	Database engines. Valid values: 1. <code>postgresql</code> (TencentDB for PostgreSQL) 2. <code>mssql_compatible</code> (MSSQL compatible-TencentDB for PostgreSQL)
DBVersion	String	Database version, such as 12.4.
DBMajorVersion	String	Database major version, such as 12.
DBKernelVersion	String	Database kernel version, such as v12.4_r1.3.
SupportedFeatureNames	Array of	List of features supported by the database kernel, such as:

	String	TDE: Supports data encryption.
Status	String	Database version status. Valid values: AVAILABLE . DEPRECATED .
AvailableUpgradeTarget	Array of String	List of versions to which this database version ( <code>DBKernelVersion</code> ) can be upgraded.

## Xlog

Database Xlog information

Used by actions: DescribeDBXlogs.

Name	Type	Description
Id	Integer	Unique backup file ID
StartTime	Timestamp	File generation start time
EndTime	Timestamp	File generation end time
InternalAddr	String	Download address on private network
ExternalAddr	String	Download address on public network
Size	Integer	Backup file size

## ZoneInfo

AZ information such as number and status

Used by actions: DescribeZones.

Name	Type	Description
Zone	String	AZ abbreviation
ZoneName	String	AZ name
ZoneId	Integer	AZ number
ZoneState	String	Availability status. Valid values:

		UNAVAILABLE . AVAILABLE . SELLOUT . SUPPORTMODIFYONLY (supports configuration adjustment).
ZoneSupportIpv6	Integer	Whether the AZ supports IPv6 address access
StandbyZoneSet	Array of String	AZs that can be used as standby when this AZ is primary Note: this field may return <code>null</code> , indicating that no valid values can be obtained.

# Error Codes

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## Feature Description

If there is an Error field in the response, it means that the API call failed. For example:

```
{
  "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 Error indicates the error code, and Message indicates the specific information of the error.

## Error Code List

### Common Error Codes

Error Code	Description
ActionOffline	This API has been deprecated.
AuthFailure.InvalidAuthorization	<code>Authorization</code> in the request header is invalid.
AuthFailure.InvalidSecretId	Invalid key (not a TencentCloud API key type).
AuthFailure.MFAFailure	MFA failed.
AuthFailure.SecretIdNotFound	Key does not exist. Check if the key has been deleted or disabled in the console, and if not, check if the key is correctly entered. Note that whitespaces should not exist before or after the key.
AuthFailure.SignatureExpire	Signature expired. Timestamp and server time cannot differ by more than five minutes. Please

	ensure your current local time matches the standard time.
AuthFailure.SignatureFailure	Invalid signature. Signature calculation error. Please ensure you've followed the signature calculation process described in the Signature API documentation.
AuthFailure.TokenFailure	Token error.
AuthFailure.UnauthorizedOperation	The request is not authorized. For more information, see the <a href="#">CAM</a> documentation.
DryRunOperation	DryRun Operation. It means that the request would have succeeded, but the DryRun parameter was used.
FailedOperation	Operation failed.
InternalServerError	Internal error.
InvalidAction	The API does not exist.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Invalid parameter value.
InvalidRequest	The multipart format of the request body is incorrect.
IpInBlacklist	Your IP is in uin IP blacklist.
IpNotInWhitelist	Your IP is not in uin IP whitelist.
LimitExceeded	Quota limit exceeded.
MissingParameter	A parameter is missing.
NoSuchProduct	The product does not exist.
NoSuchVersion	The API version does not exist.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
RequestLimitExceeded.GlobalRegionUinLimitExceeded	Uin exceeds the frequency limit.
RequestLimitExceeded.IPLimitExceeded	The number of ip requests exceeds the frequency limit.
RequestLimitExceeded.UinLimitExceeded	The number of uin requests exceeds the frequency

	limit.
RequestSizeLimitExceeded	The request size exceeds the upper limit.
ResourceInUse	Resource is in use.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	Resource is unavailable.
ResponseSizeLimitExceeded	The response size exceeds the upper limit.
ServiceUnavailable	Service is unavailable now.
UnauthorizedOperation	Unauthorized operation.
UnknownParameter	Unknown parameter.
UnsupportedOperation	Unsupported operation.
UnsupportedProtocol	HTTP(S) request protocol error; only GET and POST requests are supported.
UnsupportedRegion	API does not support the requested region.

## Service Error Codes

Error Code	Description
AccountNotExist	The current account does not exist.
AuthFailure	CAM signature/authentication error.
DBError	Backend database execution error.
FailedOperation.AllocateQuotasError	Failed to request a quota for resource tags.
FailedOperation.BaseNetworkAccessError	Failed to access classic network. Please try again later. If the problem persists, please contact customer service.
FailedOperation.CMQResponseError	Failed to access CMQ.
FailedOperation.CamAuthFailed	CAM authentication failed.
FailedOperation.CamCheckResourceError	Failed to get permissions. Please try again later. If the problem persists, please contact customer

	service.
FailedOperation.CamCheckResourceFailed	Failed to check resource permissions through CAM.
FailedOperation.CamSigAndAuthError	Authentication failed. Please try again later. If the problem persists, please contact customer service.
FailedOperation.CdbCgwConnectError	Failed to get project information. Please try again later. If the problem persists, please contact customer service.
FailedOperation.CreateBasicNetworkDeniedError	Classic network creation is unsupported.
FailedOperation.CreateOrderFailed	Failed to create the renewal order.
FailedOperation.DatabaseAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.DatabaseAffectedError	Data operation failed. Please contact customer service.
FailedOperation.DeleteAllRoute	Failed to delete VPC routes.
FailedOperation.DeleteResourceProjectTagError	Failed to unbind resources from a project.
FailedOperation.DeleteResourcesToTagError	Failed to unbind the resource from the tag.
FailedOperation.ESConnectError	Failed to access ES. Please try again later. If the problem persists, please contact customer service.
FailedOperation.ESQueryError	Failed to query ES. Please try again later. If the problem persists, please contact customer service.
FailedOperation.FailedOperationError	Operation failed. Please try again later.
FailedOperation.FlowCreateError	Failed to create a task. Please try again later. If the problem persists, please contact customer service.
FailedOperation.GetInstanceByResourceIdError	Failed to query the instance information. Please try again later.
FailedOperation.GetPurchaseRecordFailed	Failed to get the purchase record.

FailedOperation.GetSubnetError	Failed to query VPC subnets.
FailedOperation.GetVpcInfoError	Failed to query VPC information. Please try again later. If the problem persists, please contact customer service.
FailedOperation.IllegalROInstanceNum	Invalid number of read-only replicas.
FailedOperation.InvalidAccountStatus	The account status is incorrect, so the operation is not allowed.
FailedOperation.InvalidTradeOperate	Billing error. Corresponding purchase/renewal/configuration change operations are not allowed for the current instance.
FailedOperation.LimitOperation	Operations are not allowed on the instance.
FailedOperation.MasterInstanceQueryError	Failed to query the primary instance information.
FailedOperation.ModifyROGroupError	Failed to modify RO group configuration.
FailedOperation.NetworkNumLimitError	The number of networks does not meet resource requirements.
FailedOperation.NoAvailableStandby	The instance has no available standby server.
FailedOperation.OperateFrequencyLimitedError	The operation frequency limit is exceeded. Try again later. If the problem persists, contact customer service.
FailedOperation.OssAccessError	Failed to access database management service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.OssOperationFailed	Failed to request the backend API.
FailedOperation.PayOrderFailed	Failed to make order payment.
FailedOperation.PostPaidUnblockError	Failed to unfreeze the account of a pay-as-you-go instance. Please try again later. If the problem persists, please contact customer service.
FailedOperation.PreCheckError	Pre-check failed
FailedOperation.PresignedURLGetError	An error occurred while getting the pre-signed authorization URL.



FailedOperation.QueryDealFailed	Failed to query the order information.
FailedOperation.QueryInstanceBatchError	Failed to query instance information in batches. Please try again later. If the problem persists, please contact customer service.
FailedOperation.QueryPriceFailed	Failed to query the price.
FailedOperation.QuerySpecBySpecCodeError	Failed to query specifications.
FailedOperation.QuerySpecError	Failed to query specifications. Please try again later. If the problem persists, please contact customer service.
FailedOperation.QueryTradeStatusError	Failed to query the order status.
FailedOperation.QueryVpcFailed	Failed to query VPC.
FailedOperation.QueryVpcFalied	Failed to get VPC details.
FailedOperation.ROGroupCannotBeDeletedError	This RO group has at least one read-only replica, so it cannot be deleted.
FailedOperation.ROGroupMasterInstanceNotRight	The primary instance information of the RO group is not matched.
FailedOperation.ROGroupNotFoundError	The RO group does not exist.
FailedOperation.ROGroupNumExceedError	The maximum number of RO groups has been reached.
FailedOperation.ROInstanceHasInROGroupError	This read-only replica already belongs to another RO group.
FailedOperation.ServerlessNotSupportedError	Serverless instances do not support the operation.
FailedOperation.ServiceAccessError	Failed to access internal service. Please try again later. If the problem persists, please contact customer service.
FailedOperation.SetAutoRenewFlagError	Failed to set the auto-renewal flag.
FailedOperation.StorageMemoryCheckError	The memory and storage capacity to which an instance is upgraded should be higher than its original memory and storage capacity.
FailedOperation.StorePathSplitError	Incorrect storage path format

FailedOperation.TradeAccessError	Failed to access the billing platform. Please try again later. If the problem persists, please contact customer service.
FailedOperation.TradeCreateError	Failed to request the billing platform to create an order.
FailedOperation.TradePayOrdersError	Failed to request to pay for the order.
FailedOperation.TradeQueryOrderError	Failed to query order information. Please try again later. If the problem persists, please contact customer service.
FailedOperation.TradeQueryPriceError	Failed to query pricing information. Please try again later. If the problem persists, please contact customer service.
FailedOperation.UpdateResourceProjectTagValueError	Failed to modify the resource tag.
FailedOperation.VPCResetServiceError	Failed to configure the VPC.
FailedOperation.VPCUpdateRouteError	Failed to update VPC routes.
FailedOperation.WhitelistConnectError	Failed to query the allowlist. Try again later. If the problem persists, contact customer service.
FlowError	Failed to create the task.
InstanceNotExist	The current instance does not exist.
InterfaceNameNotFound	<code>ACTION</code> input error.
InternalError.CgwError	CGW error.
InternalError.CnsError	Basic network error.
InternalError.DBError	Backend database execution error.
InternalError.DfwError	DFW error.
InternalError.FlowError	Failed to create the flow.
InternalError.InstanceDataError	Failed to access database management service. Please contact customer service.
InternalError.InternalHttpServerError	An exception occurred while executing the request.
InternalError.MarshalError	Failed to parse background data. Please

	contact customer service.
InternalError.SystemError	System error. When this error occurs, please contact customer service for assistance.
InternalError.TransactionBeginError	Failed to enable transactions
InternalError.UnknownError	Unknown error. When this error occurs, please contact customer service for assistance.
InternalError.VpcError	VPC error.
InvalidAccountPassword	Incorrect account password.
InvalidAccountStatus	The current account status is incorrect, so the operation is not allowed.
InvalidInstanceStatus	Incorrect instance status.
InvalidParameter.InstanceNameExist	The instance name already exists.
InvalidParameter.ParameterCheckError	Failed to check the parameter.
InvalidParameter.ParametersNotSet	You can't left all parameters empty.You need to set at least one of the parameters.
InvalidParameter.TradeAccessDeniedError	Incorrect PID
InvalidParameter.VpcNotFound	Failed to query VPC information.
InvalidParameterValue.AccountExist	The current account already exists.
InvalidParameterValue.AccountNotExist	The current account does not exist.
InvalidParameterValue.AccountNotExistError	The account does not exist.
InvalidParameterValue.BadSpec	The instance specification to upgrade to is not purchasable.
InvalidParameterValue.CharsetNotFound	Incorrect database character set
InvalidParameterValue.DataConvertError	Failed to convert data format. Please contact customer service.
InvalidParameterValue.IllegalChargeType	Unsupported billing type.
InvalidParameterValue.IllegalInstanceChargeType	Incorrect billing mode.
InvalidParameterValue.IllegalProjectId	Invalid <code>ProjectId</code> .

InvalidParameterValue.IllegalRegion	Invalid <code>Region</code> parameter.
InvalidParameterValue.IllegalZone	Invalid <code>Zone</code> parameter.
InvalidParameterValue.InstanceNameExist	The account already exists.
InvalidParameterValue.InstanceNotExist	The current instance does not exist.
InvalidParameterValue.InterfaceNameNotFound	Incorrect <code>ACTION</code> .
InvalidParameterValue.InvalidAccountError	Invalid account. The account name is case-insensitive, must contain 1-16 characters comprised of letters, digits, underscores, and should neither be "postgres" nor start with a digit or "pg_".
InvalidParameterValue.InvalidAccountFormat	Incorrect account format.
InvalidParameterValue.InvalidAccountName	The current account name cannot be a reserved character.
InvalidParameterValue.InvalidCharset	Incorrect database character set. Currently, only <code>UTF8</code> and <code>LATIN1</code> are supported.
InvalidParameterValue.InvalidInstanceNum	The number of purchased instances exceeds the limit.
InvalidParameterValue.InvalidInstanceVolume	The instance specification to upgrade to cannot be lower than the current instance specification.
InvalidParameterValue.InvalidOrderNum	Billing error. Invalid order type ID.
InvalidParameterValue.InvalidParameterValueError	Incorrect parameter value
InvalidParameterValue.InvalidPasswordFormat	Incorrect password format.
InvalidParameterValue.InvalidPasswordLengthError	Invalid password. The password length does not meet the requirements.
InvalidParameterValue.InvalidPasswordValueError	Invalid password. The password must contain uppercase letters, lowercase letters, digits, and symbols ( <code>()`~!@#\$\$%^&amp;*~+=_</code>
InvalidParameterValue.InvalidPid	Incorrect <code>PID</code> parameter.
InvalidParameterValue.InvalidReadOnlyGroupStatus	RO group in incorrect status
InvalidParameterValue.InvalidRegionIdError	Invalid region

InvalidParameterValue.InvalidZoneIdError	Invalid availability zone.
InvalidParameterValue.NullDealNames	Empty order name.
InvalidParameterValue.ParameterCharacterError	Invalid parameter. The parameter can contain only letters, digits, underscores, and hyphens.
InvalidParameterValue.ParameterCharacterLimitError	The parameter is invalid. Please modify it and try again.
InvalidParameterValue.ParameterCharacterPreLimitError	The parameter prefix is invalid. Please modify it and try again.
InvalidParameterValue.ParameterHandleError	Failed to process the parameter. Please check if the parameter value is valid.
InvalidParameterValue.ParameterLengthLimitError	The length of parameter exceeds the limit.
InvalidParameterValue.ParameterOutOfRange	Invalid parameter
InvalidParameterValue.ParameterOutOfRangeError	Invalid parameter values.
InvalidParameterValue.ParameterValueExceedError	The maximum value of the parameter has been reached.
InvalidParameterValue.ReadOnlyGroupNotExist	The RO group does not exist.
InvalidParameterValue.RegionNotSupported	The current region is not supported.
InvalidParameterValue.SpecNotRecognizedError	Failed to identify the specification ({{1}}).
InvalidParameterValue.StructParseFailed	An error occurred while parsing parameters.
InvalidPid	Incorrect <code>PID</code> parameter.
LimitOperation	Operations are not allowed on the instance.
OperationDenied.CamDeniedError	This operation cannot be performed.
OperationDenied.DTSInstanceStatusError	The target instance failed the status check.
OperationDenied.InstanceAccessDeniedError	You do not have the permission to operate this resource.
OperationDenied.InstanceIpv6NotSupportedError	IPv6 is not supported.
OperationDenied.InstanceStatusDeniedError	This operation cannot be performed on an instance in this status.

OperationDenied.InstanceStatusLimitError	This operation cannot be performed on an instance in this status.
OperationDenied.InstanceStatusLimitOpError	This operation cannot be performed on an instance in this status.
OperationDenied.InstanceTypeDenied	Invalid instance type
OperationDenied.NotSupportZoneError	Serverless is not supported in this availability zone.
OperationDenied.PayModeError	Unsupported billing mode
OperationDenied.PostPaidPayModeError	Pay-as-you-go instances cannot be renewed.
OperationDenied.ROGroupStatusError	This operation cannot be performed on an RO group in this status.
OperationDenied.ROInstanceIpv6NotSupportedError	Read-only instances do not support IPv6.
OperationDenied.ROInstanceStatusLimitOpError	This operation cannot be performed on a read-only instance in this status.
OperationDenied.ROInstanceCountExceedError	The total number of read-only nodes should not exceed the upper limit.
OperationDenied.UserNotAuthenticatedError	You need to verify your identity to make a purchase.
OperationDenied.VersionNotSupportError	Serverless is not supported on this version of PostgreSQL.
OperationDenied.VpcDeniedError	You do not have the permission to operate the VPC.
RegionNotSupported	The region is not supported.
ResourceInsufficient.ResourceNotEnough	There are not enough resources to purchase instances of this specification in the current region.
ResourceNotFound.InstanceNotFoundError	The instance does not exist.
ResourceUnavailable.InvalidInstanceStatus	Incorrect instance status.
ResourceUnavailable.ResourceNoPermission	No permission for the VPC.
ResourceUnavailable.VpcResourceNotFound	Failed to get the information of the VPC where the instance resides.

StructParseFailed	An error occurred while parsing parameters.
SystemError	System error. When this error occurs, please contact customer service for assistance.
UnauthorizedOperation.UserHasNoRealnameAuthentication	Unverified user.
UnknownError	Unknown error. When this error occurs, please contact customer service for assistance.
VpcError	VPC error