

# Tencent Cloud Distributed Cache (Redis OSS-Compatible) Getting Started Product Documentation



## Copyright Notice

©2013–2026 Tencent Cloud. All rights reserved.

Copyright in this document is exclusively owned by Tencent Cloud. You must not reproduce, modify, copy or distribute in any way, in whole or in part, the contents of this document without Tencent Cloud's the prior written consent.

## Trademark Notice



All trademarks associated with Tencent Cloud and its services are owned by the Tencent corporate group, including its parent, subsidiaries and affiliated companies, as the case may be. Trademarks of third parties referred to in this document are owned by their respective proprietors.

## Service Statement

This document is intended to provide users with general information about Tencent Cloud's products and services only and does not form part of Tencent Cloud's terms and conditions. Tencent Cloud's products or services are subject to change. Specific products and services and the standards applicable to them are exclusively provided for in Tencent Cloud's applicable terms and conditions.

# Contents

## Getting Started

Quickly Creating an Instance

Connecting to an Instance (Redis/Valkey Edition)

# Getting Started

## Quickly Creating an Instance

Last updated: 2026-04-03 18:13:31

### Overview

This document describes how to purchase and configure a Tencent Cloud Distributed Cache instance.

### Prerequisites

- You have registered a Tencent Cloud account and completed identity verification.
  - Click [here](#) to register a Tencent Cloud account
  - Click [here](#) to complete identity verification.
- You have determined a region and AZ for the instance. For more information, see [Regions and AZs](#).
- You have determined the specification and performance requirements of the instance. For more information, see [Memory Edition \(Standard Architecture\)](#) and [Performance](#).
- You have determined a VPC and security group for the instance. For more information, see [Virtual Private Cloud](#) and [Configuring Security Groups for TencentDB](#).
- To deploy the instance across multiple AZs in the same region, learn more about the architecture of [multi-AZ deployment](#) first.
- To support [read/write separation](#), learn more about how it is implemented first.
- You have checked out the billing details of the instance. For more information, see [Billing Overview](#). Database fees for one hour will be frozen when you create a pay-as-you-go database. Make sure that your account balance is sufficient before making a purchase.

### Directions

1. Log in to the [Tencent Cloud Distributed Cache purchase page](#) with your Tencent Cloud account.
2. Configure the instance as needed based on the parameter descriptions below:

Parameter	Required	Description
Billing Mode	Yes	Pay-as-you-go is supported. For more information, see <a href="#">Billing Overview</a> .
Region	Yes	Select the region where the instance located, ensuring it matches the region of the CVM instance; otherwise, it cannot communicate directly via the private network.

<b>Instance Edition</b>	Yes	<ul style="list-style-type: none"> <li>● <b>Redis Edition:</b> A high-performance version built upon the open-source Redis storage engine.</li> <li>● <b>Memcached Edition:</b> A version based on the Memcached storage engine.</li> <li>● <b>ValKey Edition:</b> A version utilizing the ValKey storage engine.</li> </ul>
<b>Compatible Version</b>	Yes	<ul style="list-style-type: none"> <li>● <b>Redis Edition:</b> Compatible with Redis versions 7.0, 6.2, 5.0, 4.0, and 2.8. Please note that Redis 2.8 is no longer available for purchase. We recommend selecting version 4.0 or higher. If you require version 2.8, kindly <a href="#">submit a ticket</a> to request access.</li> <li>● <b>Memcached Edition:</b> Compatible with the Memcached protocol version 1.6.</li> <li>● <b>ValKey Edition:</b> Compatible with ValKey 8.0 version.</li> </ul>
<b>Architecture</b>	Yes	<p>Select the product deployment architecture. For detailed information, please refer to:</p> <ul style="list-style-type: none"> <li>● <b>Redis Edition:</b> Select the standard architecture.</li> <li>● <b>Memcached Edition:</b> Only the cluster architecture is supported.</li> <li>● <b>ValKey Edition:</b> Supports both standard and cluster architectures.</li> </ul>
<b>Memory Capacity</b>	Yes	Select the minimum capacity for the standard architecture to quickly experience.
<b>Replica Quantity</b>	Yes	Choose 1 (1 master, 1 replica).
<b>Specs Preview</b>	–	Preview the selected specification and the supported maximum number of connections and maximum network throughput to verify whether they meet your expectations.
<b>Network</b>	Yes	Currently, only <b>VPC</b> is supported.
<b>AZ</b>	Yes	Selected by default: <b>Multiple AZs Deployment</b> .
<b>IPv4 Network</b>	Yes	Select the <b>VPC</b> and subnet. We recommend that you select the same VPC in the same region as the CVM instance to be connected to.
<b>Port</b>	Yes	<p>Custom port number: keep the default settings.</p> <ul style="list-style-type: none"> <li>● <b>Redis Memory Edition:</b> The default port number is 6379.</li> <li>● <b>Memcached Edition:</b> The default port number is 11211.</li> </ul>

		<ul style="list-style-type: none"> <li>● <b>ValKey Edition:</b> The default port number is 6379.</li> </ul>
<b>Security Group</b>	Yes	<p>Set security group rules to control the inbound traffic to your database.</p> <ul style="list-style-type: none"> <li>● Set security group rules to control the inbound traffic to your database. You can either select a security group from the <b>Existing Security Groups</b> drop-down list or click <b>Custom Security Groups</b> to create one and set <b>inbound rules</b>. For more information, see <a href="#">Configuring Security Group</a>.</li> <li>● After selecting a security group from the drop-down list, click <b>Preview Rules</b> to learn about the protocol rules and policies of this security group.</li> </ul>
<b>Instance Name</b>	Yes	Supports Chinese, letters, and digits with a length less than 60, including hyphens (-) and underscores (_).
<b>Setting password</b>	Yes	Select the authentication method, and select the <b>Passwordless Authentication</b> .
<b>Terms of Service</b>	Yes	<ul style="list-style-type: none"> <li>● Click <b>Terms of Service</b> to fully understand the use of Cloud Database Service content, service fees, usage rules, intellectual property, and other related service terms.</li> <li>● Click <b>Service Level Agreement</b> to understand the agreement that must be complied with when using TencentDB for Redis®.</li> <li>● Check the box <b>I have read and agree to the Terms of Service and Service Level Agreement</b>.</li> </ul>

3. After verifying that the parameters are correctly configured, click **Buy Now**. After the purchase success message is displayed, click **Go to Console**. After the instance becomes **Running** in the status, you can use it normally.

## Related Operations

Use a CVM instance to directly access the private network address of the TencentDB instance. For more information, see [Connecting to Tencent Cloud Distributed Cache Instance](#).

# Connecting to an Instance (Redis/Valkey Edition)

Last updated: 2026-04-03 18:14:55

## Overview

Once the instance is created and its status becomes Running, you can connect to the database to perform read/write and query operations. This document describes three methods to connect to the database.

- Connection via client: You can connect to a TencentDB instance at its automatically assigned private address from a Windows or Linux CVM instance based on the client. This connection method utilizes the high-speed private network of Tencent Cloud and features low delay. Both instances should be under the same account and reside in the same [VPC](#) in the same region or reside in the classic network.

### Note:

- CVM and TencentDB instances in different VPCs (under the same or different accounts in the same or different regions) can be interconnected over the private network through [Cloud Connect Network](#).
- Tencent Cloud Lighthouse and Cloud Database do not communicate via the private network by default. To enable private network access, see [Lighthouse Application for Cloud Connect Network Association](#).
- CVM and TencentDB instances in different VPCs can be connected through the public network address as instructed in [Configuring Public Network Address](#).

- Connection via DMC: You can use Tencent Cloud Database Management Center (DMC) to log in to your TencentDB instance to access them, view their key metric information, and run Redis commands.
- Connection via SDK: You can connect to a Tencent Cloud Distributed Cache instance by configuring auto-assigned private IP address, port, instance ID, and password in the SDK for the corresponding programming language. Then, you can manipulate it, get and set its key, and do more.

## Prerequisites

- Prepare a Tencent Cloud Distributed Cache instance. For more information, see [Creating Tencent Cloud Distributed Cache Instance](#).
- Prepare a database account and password. For more information, see [Managing Account](#). You can use the default account or a custom account.
- Configure security group rules for the CVM instance and the Tencent Cloud Distributed Cache instance. For more information, see [Configuring Security Group](#).

- Obtain the **Private IPv4 Address** for database connection in the **Network Info** section on the **Instance Details** page in the [Tencent Cloud Distributed Cache console](#).

## Connecting by Using Client Tool

### Note:

The Redis 6.2 version does not support the RESP3 protocol.

## Connecting from a Linux CVM instance

### Step 1. Prepare the environment

1. Log in to the Linux CVM instance. For more information, see [Customizing Linux CVM Configurations](#).
2. Take a CVM instance running CentOS as an example. Run the following command to install the Redis protocol client:

```
yum install redis -y
```

If `Complete!` is displayed, the client is installed successfully.

### Step 2. Connect to an instance

- **Passwordless authentication**

If your instance is password-free, the connection command is as follows:

```
redis-cli -h IP address -p port
```

Here, the IP address and port are the **Private IPv4 Address** and **Port** obtained in the **Network Info** section on the **Instance Details** page in the [Tencent Cloud Distributed Cache console](#).

Network Info	
Network	guangzhoushanqu <a href="#">Change Network</a>
Subnet	guangzhoushanqu <a href="#">Change Subnet</a>
Private IPv4 Address	10.0.0.16:6379 <a href="#">🔍</a> <a href="#">✎</a>
Public Network Address	Enable
Max Connections	10,000 <a href="#">Adjust</a> <a href="#">Real-Time Session</a>
Max Network Throughput	128Mb/s <a href="#">Adjust Bandwidth</a>

- **Access with default account**

The default account refers to the account assigned by the system by default. When you purchase and create a Tencent Cloud Distributed Cache instance, the password you set to access the instance is the database password corresponding to the default account. To use the default account with a password to access the database, the following open-source connection command is supported:

```
redis-cli -h IP address -p port -a password
```

Here, the IP address and port are the **Private IPv4 Address** and **Port** obtained in the **Network Info** section on the **Instance Details** page in the [Tencent Cloud Distributed Cache console](#). For example, if the password you set is `abcd1234`, the connection command should be as follows:

```
redis-cli -h IP address -p port -a abcd1234
```

**Note:**

To access instances purchased before January 2018, you need to replace the "password" with "instance ID:password", for example, `redis-cli -h IP address -p port -a crs-bkuza6 i3:abcd1234`.

- **Access with custom account**

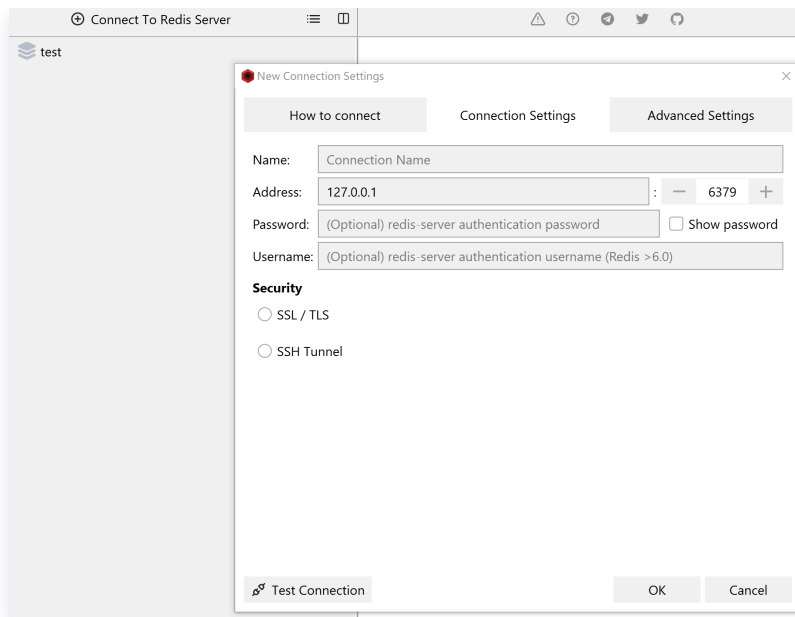
If you use a custom account as described in [Managing Account](#) when connecting, then the authentication method of the custom account is `account name@password`, which acts as the password parameter for accessing Tencent Cloud Distributed Cache:

```
redis-cli -h IP address -p port -a account name@password
```

## Connecting from a Windows CVM instance

1. Configure and log in to the Windows CVM instance. For more information, see [Customizing Windows CVM Configurations](#).
2. In the Windows CVM instance, download the Tencent Cloud Distributed Cacheclient over the internet and install it.
3. Open the Redis client, configure the instance's private IP address, and click **Test Connection** to connect to the instance.

Parameter	Description
Name	The name of the connection to the database instance.
Address	Enter the private IPv4 address of the database instance, which can be obtained in the <b>Network Info</b> section on the <b>Instance Details</b> page in the console.
Verification	Enter the password for database instance connection.



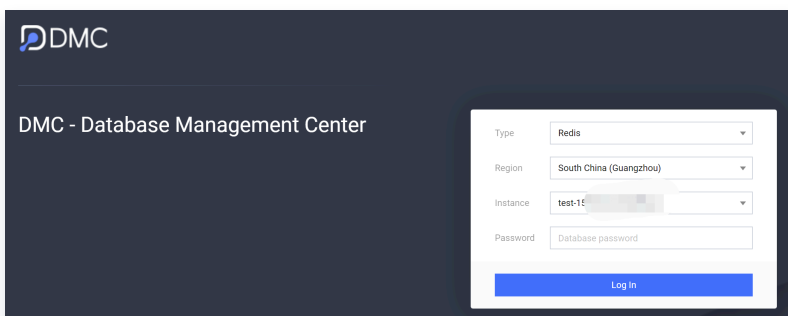
4. Click  and enter a Redis command in the input box in the bottom-right corner to run it.

## Connection via DMC

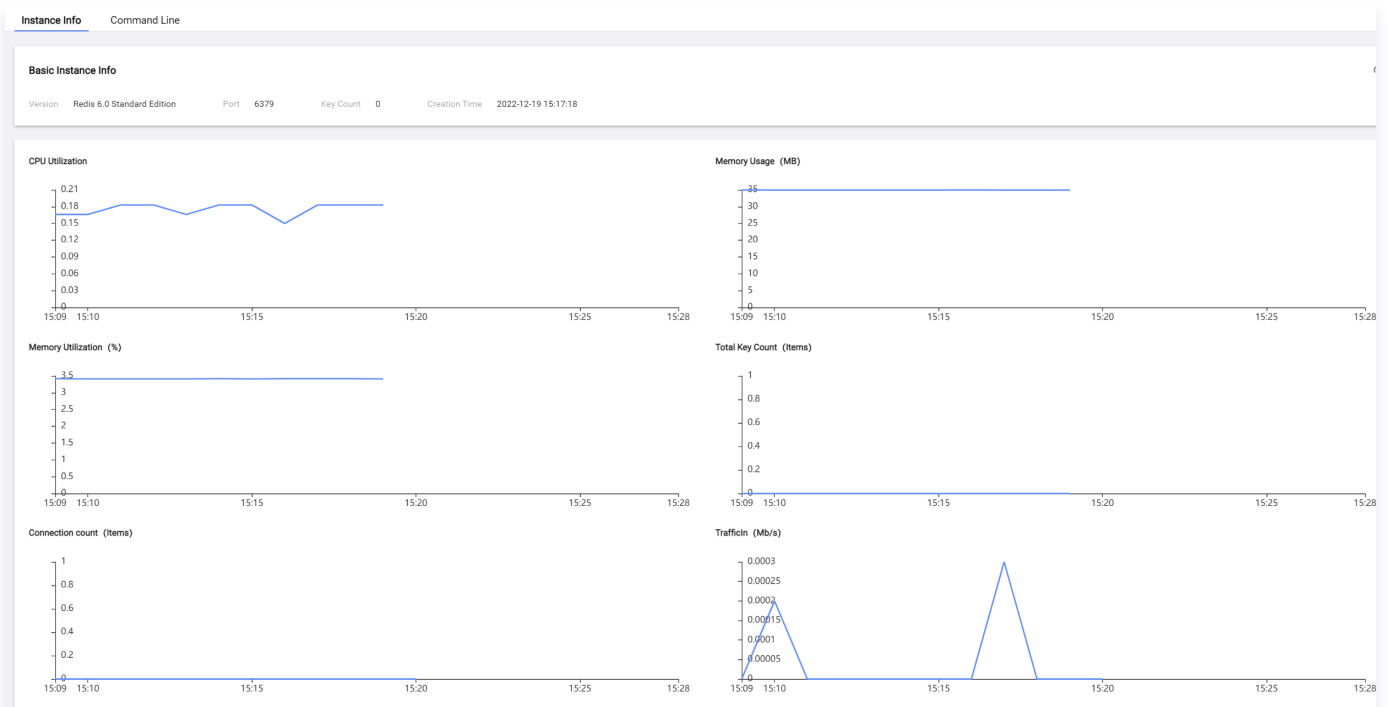
### Note:

Memcached instances do not currently support DMC connections.

1. Log in to the [Tencent Cloud Distributed Cache console](#).
2. Above the instance list, select the region.
3. In the instance list, find the target instance.
4. Click **Log In** in the **Operation** column.
5. You will be redirected to the login page of [DMC](#). Enter the default account password of the target instance and click **Log In**.



6. You can view the instance monitoring information on the **Instance Info** tab on the **Database Management** page.



7. Click the **Command Line** tab and enter a Redis command in the input box at the bottom to run it:

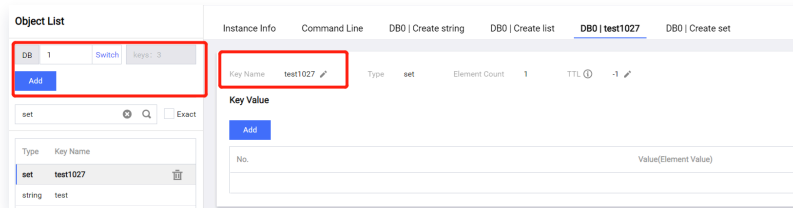
```

Instance Info      Command Line
[ crs-0cs3h9eu | DB0 ] # set test 123
OK
[ crs-0cs3h9eu | DB0 ] # get test
123
[ crs-0cs3h9eu | DB0 ] # set test 456
OK
[ crs-0cs3h9eu | DB0 ] # mget test
1) "456"
[ crs-0cs3h9eu | DB0 ] # set name redis
OK
[ crs-0cs3h9eu | DB0 ] # mget test name
1) "456"
2) "redis"

```

8. If you are unfamiliar with Redis command parameters, you can select the slot range and database for storing key values in the **Object List** section on the left of the page, click **Create**, select the key data type, click **OK**, edit the key name in the **Key Name** input box, and click **Add element and create key**.

Then, enter the corresponding key value and click **OK** in the **Add Element** window. The system will run commands based on the set key and key value.



## Connection via SDK

Tencent Cloud Distributed Cache can be accessed via SDKs for various programming languages, including PHP, Java, Node.js, Python, C, Go, and .NET. For specific samples, see [PHP Connection Sample](#). You can download an SDK client and then connect to a Tencent Cloud Distributed Cache instance by configuring its private IP, port, instance ID, and password as instructed in the sample code.

## FAQs

- If the connection failed, see [Distributed Cache Instance Connection Failure](#) for troubleshooting one by one.
- For more FAQs, see [Connection and Login](#).