

ApsaraDB for Memcache

User Guide

User Guide

Log on to the console

Use the account for purchasing ApsaraDB for Memcache to log on to the Memcache console. The system displays the Memcache **Instance List** interface.

Switch between old and new consoles

Background

Now, if you go to the console home page > **Products and Services** menu and select **ApsaraDB for Memcache**, the page automatically jumps to the new version of Memcache console. The addresses for the new and old versions of consoles are different. You can switch between them manually or in the console.

Note: For comparison of the features included in the new and old versions of Memcache, see [Comparison between New and Old Versions](#).

Manual switch

You can switch between the new and old console versions by manually inputting the console address.

Address of the old version console: <https://ocsnew.console.aliyun.com/>

Address of the new version console:
<https://kvstore.console.aliyun.com/?instanceType=Memcache#/home/>

Switch in the console

On the **Instance List** page of the new version Memcache console, click the **Return to old version OCS console** link in the upper right and you will be taken to the older-version Memcache console.

Instruction: If you want to return to the new version console, select ApsaraDB for Memcache in the left-side navigation pane in the console or in the **Products and Services** menu.

Related FAQs

How can I manage and change the configuration of the old version ApsaraDB for Memcache?

A: You can continue managing old version ApsaraDB for Memcache instances in Alibaba Cloud console. Activated old version instances can be managed normally, changed in configuration and released.

How can I purchase another old version ApsaraDB for Memcache instance?

A: The old version ApsaraDB for Memcache will no longer support purchasing new instances. You may only purchase a new version ApsaraDB for Memcache product. Alibaba Cloud is expected to launch single-node ApsaraDB for Memcache in August 2017. By that time, the single-node product will have the same prices as the old version ApsaraDB for Memcache does. You can flexibly choose single-node or dual-node product formats to meet diverse business needs.

How can I upgrade an old version ApsaraDB for Memcache instance to the new version?

A: Currently ApsaraDB for Memcache does not support one-click upgrade from the old version to the new version. To upgrade Memcache to the new version, you must purchase a new version ApsaraDB for Memcache instance, push data manually, direct your apps to the domain name of the new ApsaraDB for Memcache instance and then release the old version Memcache instance.

Manage instance

Change the password

You can reset an instance password if you forget the password, need to change the password, or have not set a password.

Log on to the Memcache console.

Locate the target instance, click the instance ID or **Manage** to enter the **Instance Information** page.

Click the **Change Password** button in the upper right corner.

On the **Change Password** page, enter the old password and the new password and click **OK** if you want to change the old password.

Note:

If you forget your password, click **Forgot Password** in the **Change Password** window. Then you can set a new password in the **Reset Password** window.

The password must consist of 8 to 30 characters, including upper-case letters, lower-case letters, and digits at the same time.

Change configurations

ApsaraDB for Memcache supports subscription and Pay-As-You-Go payment options. Pay-As-You-Go can be upgraded to the subscription option. Configuration change is enabled in both of the two options.

Notes

Changing instance configuration will cause a change in charges. For detailed charging standards, please see [ApsaraDB for Memcache pricing details](#).

Pay-As-You-Go supports real-time configuration upgrades and downgrades.

Subscription only supports configuration upgrades within the service period. You can choose to downgrade a configuration when renewing an expired instance.

For example, if your 2 GB instance will expire on December 31, 2017, you are only allowed to

upgrade the instance configuration before December 31, 2017. When you renew the instance after it expires, you can downgrade the configuration to 1 GB, and the new configuration will take effect starting on January 1, 2018.

During configuration changes, the instance may experience a transient disconnection lasting several seconds. You are recommended to perform the upgrade during low traffic periods.

Procedure (Pay-As-You-Go)

Log on to the Memcache console.

Locate the target instance and click **Change Configuration**.

Select the expected configuration on the **Change Configuration** page and click **Confirm Change**. A prompt will be displayed after successful configuration change. For Pay-As-You-Go instances, the charges will be calculated based on the new rates from the billing cycle that the configuration change takes effect.

Procedure (subscription)

Log on to the Memcache console.

Locate the target instance and click **Change Configuration**.

Note: Subscription instances only support configuration upgrades.

Select the expected configuration on the **Change Configuration** page and click **Confirm Change**.

The **Payment** page will display after the changes are submitted. Select the expected billing method and click **Confirm Payment**.

A prompt page will be displayed after successful payment indicating that the configuration changes have been completed successfully.

Set network type

ApsaraDB supports two network types: classic network and Virtual Private Cloud (VPC). This chapter describes the differences between the two network types and the method of configuration.

Differences

A classic network and VPC have the following differences:

Classic network: The cloud service on classic networks are not isolated, and unauthorized access can be blocked only by cloud service security groups or whitelist policies.

Virtual Private Cloud (VPC): VPC helps you to build an isolated network environment on the Alibaba Cloud. You can customize the route table, IP address range and gateway in the VPC. In addition, you can combine your own data center and cloud resources in the VPC of Alibaba Cloud into a virtual data center through a leased line or VPN to migrate applications to the cloud smoothly.

Note:

By default, Memcache uses a classic network. If you want to use VPC, make sure that Memcache and the VPC are in the same region.

A classic network can be converted to a VPC, but not vice versa.

No Memcache instance available

If no Memcache instances have been created, you can first create a VPC and then create a Memcache instance under the VPC.

Create a VPC. For more information, see [VPC Quick Start](#).

Create a Memcache instance in the same region as the VPC.

During the purchase process, select **VPC** for network type and select the corresponding VPC. See [Purchase](#).

A Memcache instance available

If a Memcache instance has been created, you can create the VPC in the same region as Memcache, and then add the Memcache instance to the VPC.

Create a VPC in the same region as the Memcache instance. For more information, see [VPC Quick Start](#).

Log on to the Memcache console and locate the target instance.

In the **Connection Information** bar, click **Switch to VPC**.

On the **Switch to VPC** page, select **VPC** and **VSwitch**, and click **OK**.

Note: After the switch, the ECS instance in the classic network will not be able to access instances in the VPC.

Release an instance

Background

Memcache instances support two payment options: Pay-As-You-Go and subscription. Pay-As-You-Go instances can be released on your own initiative, while subscription instances cannot.

Procedure

Log on to the Memcache console.

On the **Instance List** page, locate the target instance.

In the **Operation** bar, click **Release** and click **OK** in the dialog box.

Click **Get Verification Code**, enter the mobile phone verification code, and click **OK**.

Clear instance cache

Procedure

Log on to the Memcache console.

On the **Instance List** page, locate the target instance.

Click the instance ID or **Operation** bar > **Manage** option.

On the **Instance Information** page, click **Clear Data** in the upper right corner and click **OK** in the dialog box.

Click **Get Verification Code**, enter the mobile phone verification code, and click **OK**.

Recharge

Background

You can renew the Subscription instance within the contract period or 7 days after contract expiration. A Pay-As-You-Go instance is billed according to the actual usage time, so no renewal is required. For more information, see [Outstanding Payment Description](#).

ApsaraDB for Memcache supports manual renewal.

Procedure

Note: You can change the instance configuration during manual renewal. If you want to change configuration without renewal, see [Change configuration](#).

Log on to the Memcache console, find the subscription instance that you want to renew, and click **Renew**.

Enter the **Confirm order** page, select the expected service time for renewal, and click **Confirm change**.

Note: If you want to change instance configuration, select **Change configuration at the same time** on the renewal page, and select the target configuration. For descriptions on changing the configuration during renewal and the billing standard, see [Configuration change description](#).

The **Payment** page is displayed after the changes are submitted. Select the expected billing method and click **Confirm Payment**.

After you make the payment, you are directed to the **Payment Successful** page. This concludes the renewal process.

Set maintenance window

Background

To guarantee the stability of ApsaraDB for Memcache instances, the backend system irregularly maintains instances and machines on the Alibaba Cloud platform.

Before official maintenance, ApsaraDB for Memcache sends SMS messages and emails to contacts configured on your Alibaba Cloud account.

To guarantee stability during the maintenance process, instances enter the **Being Maintained** state before the preset O&M time on the day of maintenance. When an instance is in this state, normal access to data in the database is not affected. However, change-related functions (for example, configuration changes) are temporarily unavailable for this instance on the console, whereas query functions such as performance monitoring are still available.

Note: After the preset O&M time is reached, instances may experience intermittent interruption during maintenance, so we recommend that instances be maintained during off-peak hours if possible.

Procedure

Log on to the Memcache console and locate the target instance.

Click **Instance ID** or **Manage** to go to the **Instance Information** page.

Click **Set** next to **O&M Time** in **Basic Information**.

The default O&M time for ApsaraDB for Memcache is from 02:00 to 06:00.

Select an O&M time and click **Save**.

Note: The O&M time is in Beijing time.

Performance monitoring

ApsaraDB for Memcache supports performance monitoring. You can create custom metrics based on your business needs.

Log on to the Memcache console.

Click Instance ID or **Manage** to go to the **Instance Information** page.

Select **Performance Monitoring** in the navigation bar on the left.

Click **Custom Metrics** and select the expected monitoring group.

Note: You can select a time range to view historical metric data.

Set IP whitelists

Background

To guarantee database security and stability, you must add IP addresses or IP address segments used

for database access to the whitelist of the target instance before using ApsaraDB for Memcache. Correct use of the whitelist improves access security protection for ApsaraDB for Memcache. We recommend that the whitelist be regularly maintained. This document describes mainly procedure for setting the whitelist.

Notes:

The ECS and Memcache instances you want to add to the whitelist must be in the same region.

If an application needs to access multiple ApsaraDB for Memcache instances on the same ECS server, you can bind an IP address with multiple Memcache instances.

Procedure

Log on to the Memcache console.

On the **Instance List** page, locate the target instance.

Click the instance ID or **Operation** bar > **Manage** option to enter the **Instance Information** page.

Select **Security Settings** from the left-side navigation pane and click **Modify** in the **default** whitelist group.

Note: If you want to use the custom group, please click **Clear** in the **default** whitelist group to delete the IP address 127.0.0.1 from the default group, and then click **Add Whitelist Group** to create a custom group. The remaining procedure are similar to the following steps.

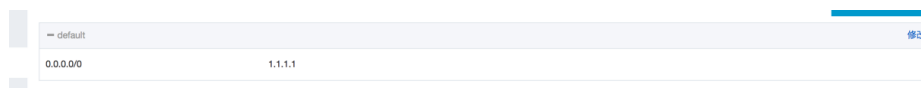
In the **Modify Whitelist Group** window, enter **Group Name** and **In-group Whitelist IP** address list, and click **OK**.

Notes:

Be sure to remove 0.0.0.0/0 when you modify the whitelist. As 0.0.0.0/0 allows access from all IP addresses, and it may cause serious security issues.

The setting in the following figure is incorrect, as 0.0.0.0/0 includes 1.1.1.1

(covering all other IP addresses), so it has the same effect as the setting of 0.0.0.0/0.



Parameter descriptions:

Group name: The group name contains 2 to 32 characters which consist of lowercase letters, digits, or underscores. The group name must start with a lowercase letter and end with a letter or digit. When you have successfully created a whitelist group, its name can no longer be modified.

In-group whitelist: Enter the IP address or IP segment that can access the Memcache instance. To allow all IP addresses to access the database, set the whitelist to 0.0.0.0/0. To disable database access from all IP addresses, set the whitelist to 127.0.0.1.

If you enter an IP segment, e.g. 10.10.10.0/24, it indicates that all IP addresses in the 10.10.10.X segment can access this Memcache instance.

If you must add multiple IP addresses, please use an English comma to separate them, and no space is allowed before or after the comma.

You can add 1000 IP addresses to each whitelist group.

Password-free access

Background

Generally, SASL authentication is performed on accesses to an ApsaraDB for Memcache instance. That is, you must enter the correct user name and password to perform operations on the data. Some users also hope ApsaraDB for Memcache supports password-free access to facilitate usage and integration of third-party software, which is actually already supported by ApsaraDB for Memcache. You can enable password-free access after setting the whitelist so that all applications on the whitelist can access the corresponding ApsaraDB for Memcache instance without a password.

Notes:

The ECS instance and Memcache instance you want to enable password-free access must be in the same region.

If an application needs to access multiple ApsaraDB for Memcache instances on the same ECS server, you can bind an IP address with multiple Memcache instances to allow password-free access.

Memcache text protocol does not support password access. If you use the text protocol to access Memcache, you must enable IP whitelist password-free access.

Before enabling whitelist password-free access, you must remove 0.0.0.0/0 from the whitelist, or the password-free access function will not be able to take effect.

Procedure

Log on to the Memcache console.

On the **Instance List** page, locate the target instance.

Click Instance ID or **Manage** at the right side to go to the **Instance Information** page.

Select **Security Settings** on the left-side navigation pane.

After setting IP whitelist, select the **Enable** option next to **Password-free Access** and click **Submit**, then you can access the current Memcache instance without a password.

Related questions

The password-free access function does not take effect after being enabled.

For the sake of security, Memcache disables the whitelist password-free access function when 0.0.0.0/0 is on the whitelist. Check if the 0.0.0.0/0 IP segment is on the whitelist. If yes, remove it from the whitelist group.

The password-free access function becomes invalid after upgrading to a new version. For the

sake of security, the new version disables the whitelist password-free access function when 0.0.0.0/0 is on the whitelist, while the earlier version does not have this setting. Therefore, if you have upgraded to a new version, check if the 0.0.0.0/0 IP segment is on the whitelist. If yes, remove it from the whitelist group.

Set parameters

ApsaraDB for Memcache supports six data eviction policies. You can set your expected eviction policy by modifying the maxmemory-policy parameter in the console.

Procedure

Log on to the **Memcache console** and locate the target instance.

Click Instance ID or **Manage** to go to the **Instance Information** page.

Select **Parameter Settings** in the navigation bar on the left.

Click **Modify** at the right of maxmemory-policy.

Select your expected eviction policy, and click **OK**.

Backup and recovery

Automatic backup (backup policy setting)

Log on to the **Memcache console** and locate the target instance.

Click the instance ID or **Manage** to go to the **Instance Information** page.

Select **Backup and Recovery** in the left-side navigation pane.

Click **Backup Settings**.

Click **Edit** to set **Backup cycle** and **Backup time**.

Note: By default, backup data is retained for 7 days. This setting cannot be modified.

Click **OK** to complete automatic backup settings.

Manual backup (instant backup)

In addition to the general backup settings, you can initiate a manual backup request on the console at any time.

Log on to the Memcache console and locate the target instance.

Click the instance ID or **Manage** to go to the **Instance Information** page.

Select **Backup and Recovery** in the left-side navigation pane.

Click **Create Backup** in the upper right corner.

Click **OK** to instantly back up the instance.

Note: you can select a time range on the **Backup Data** page to view historical backup data. By default, backup data is retained for 7 days, so you can query historical backup data from the last 7 days.

Data recovery

The data recovery function minimizes the damage caused by database misoperations. Now, ApsaraDB for Memcache supports data recovery from backups.

Log on to the Memcache console and locate the target instance.

Click the instance ID or **Manage** to go to the **Instance Information** page.

Select **Backup and Recovery** in the left-side navigation pane.

Click the **Backup Data** tab on the **Backup and Recovery** page.

Find the backup file that you want to recover and click **Data Recovery**.

In the data recovery window, click **OK** to recover the data directly to the original instance. Alternatively, you can choose **Clone Instance** to recover the backup data to a new instance. After verifying that the recovered data is correct, you can recover the data to the original instance.

Note: As the data recovery operation is highly risky, we suggest using the clone instance method if time permits. This method creates a Pay-As-You-Go instance based on the backup data set to be recovered. After verifying that the data is correct, you can recover the data to the original instance.

Monitoring and alarm

The Memcache console provides abundant performance metric items for you to conveniently view and know the running states of instances. You can view the monitoring data of specific instances or set the threshold values for issuing alarms on the Memcache console.

Customize metric items

Log in to Memcache Console.

On the **Instance List** page, locate the target instance.

Click **Manage** on the right of the instance to go to the **Basic Information** page.

On the left navigation bar, select **Monitoring Data History**. The default data indicators include **Hit Rate**, **Item Count**, **Request Hit**|**Request Miss**.

Click **Custom Monitoring**, check the specific items and click **OK**.

View monitoring data history

Log in to Memcache Console.

On the **Instance List** page, locate the target instance.

Click **Manage** on the right of the instance to go to the **Basic Information** page.

On the left navigation bar, select **Monitoring Data History**.

Select the starting time and ending time in the query time dialog box, and click **OK**.

Set the threshold value of alarms

Log in to Memcache Console.

On the **Instance List** page, locate the target instance.

Click **Manage** on the right of the instance to go to the **Basic Information** page.

On the left navigation bar, select **Threshold Value of Alarm**.

Click the **Threshold Value of Alarm** button on the right.

Note: Clicking the threshold value of alarm button will take you to Cloud Monitor settings.

On the **Cloud Service Monitoring** page, click **Create Alarm Rule**.

Set the alarm rule and click **Next**.

Set the alarm notification object and click **OK**.