

# TDMQ for Apache Pulsar Operation Guide



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# Operation Guide

## Manage Permissions For Pulsar Instance

### Grant Access Permission To Sub-Account

Last updated: 2025-02-06 10:29:09

## Basic Concepts Of CAM

The root account authorizes sub-accounts by associating policies. The policy setting can be specific to the level of [API, Resource, User/User Group, Allow/Deny, and Condition].

## Account System

- **Root account:** It owns all Tencent Cloud resources and can access any of its resources.
- **Sub-account:** It includes sub-users and collaborators.
  - **Sub-user:** It is created and fully owned by a root account that created the sub-user.
  - **Collaborator:** Originally has the identity of a root account. After being added as a collaborator of the current root account, it becomes one of the sub-accounts, able to switch back to the root account identity.
- **Identity credentials:** Include login credentials and access certificates. **Login credentials** refer to user login names and passwords. **Access certificates** refer to TencentCloud API keys (SecretId and SecretKey).

## Resource and Permission

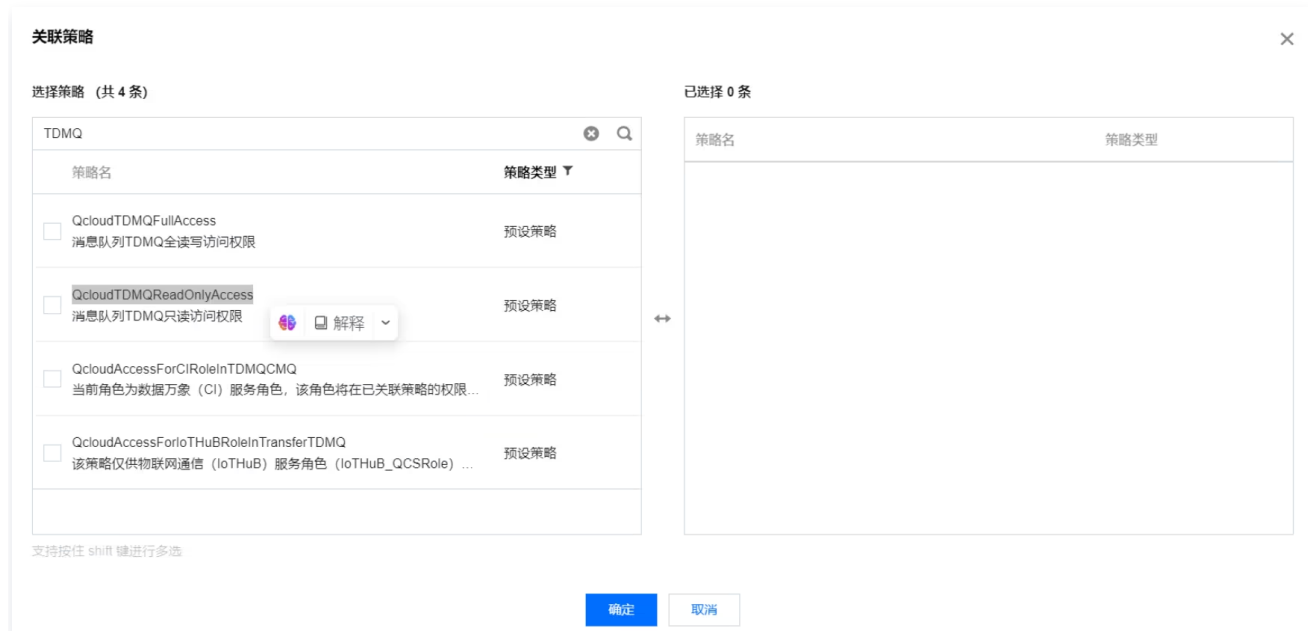
- **Resources:** Objects operated within cloud services, such as a CVM instance, COS bucket, or VPC instance.
- **Permission:** It is an authorization that allows or forbids users to perform certain operations. By default, a root account has access to all its resources, while a sub-account doesn't have access to any resources under the root account.
- **Policy:** It is a syntax rule that defines and describes one or more permissions. The root account performs authorization by associating policies with users/user groups.

## Using a Sub-Account With Pulsar

To ensure sub-accounts can use Pulsar smoothly, the root account needs to authorize the sub-accounts.

The root account logs in to the [CAM console](#), locates the target sub-account in the sub-account list, and clicks **Authorize** in the action column.

Pulsar provides two preset policies for sub-accounts: `QcloudTDMQReadOnlyAccess` and `QcloudTDMQFullAccess`. The former can only view related information in the console, while the latter can perform read-write operations in the product console.



In addition to the above preset policies, for convenience, the root account also needs to grant appropriate permissions for other cloud products to the sub-accounts based on actual needs. The following cloud product APIs are involved in using Pulsar:

Cloud Product	API Name	API Functions	Function In Pulsar
Tencent Cloud Observability Platform (Monitor)	GetMonitorData	query metric monitoring data	View the corresponding monitoring metrics displayed on the console
Tencent Cloud Observability Platform (Monitor)	DescribeDashboardMetricData	query metric monitoring data	view the corresponding monitoring metrics displayed on the console
Resource tags (Tags)	DescribeResourceTagsByResourceIds	Querying resource tag	Querying cluster resource tags

To add the above permissions to the sub-accounts, the root account also needs to perform the **Create Custom Policy** operation on the **Policy** page in the **CAM console**. After clicking **Create by Policy Syntax**, select **Blank Template** and enter the following policy syntax:

```
{
  "version": "2.0",
  "statement": [
    {
      "effect": "allow",
      "action": [
        "monitor:GetMonitorData",
        "monitor:DescribeDashboardMetricData",
        "tag:DescribeResourceTagsByResourceIds"
      ],
      "resource": [
        "*"
      ]
    }
  ]
}
```

The screenshot shows the Tencent Cloud CAM console interface for creating a policy. The 'Policy Name' field is filled with 'policygen-2020'. The 'Policy Content' field contains the JSON policy syntax shown in the previous block. The interface includes a sidebar with navigation options like 'Overview', 'Users', 'Groups', 'Policies', 'Roles', 'Identity Providers', 'Linked Accounts', and 'Access Keys'. The main content area shows the 'Select Policy Template' and 'Edit Policy' steps.

After creating the policy, associate the created policy with the sub-account in the action column, as shown below:

腾讯云 总览 云产品 云服务器 负载均衡 私有网络 容器服务 ... 搜索产品、文档... 小程序 集团账号 备案 工具 客服支持 费用

访问管理 策略 CAM策略使用说明

概览 用户 用户组 策略 角色 身份提供商 联合账号 访问密钥

策略

用户或者用户组与策略关联后，即可获得策略所描述的操作权限。

新建自定义策略 删除 全部策略 预设策略 自定义策略 搜索策略名称/描述/备注(多关键词空格隔开)

<input type="checkbox"/>	策略名	服务类型	描述	上次修改时间	操作
<input type="checkbox"/>	policyger	-	-	2023-07-06 20:51:37	<a href="#">删除</a> <a href="#">关联用户/角色</a>
<input type="checkbox"/>		-		2023-06-07 17:02:14	<a href="#">删除</a> <a href="#">关联用户/角色</a>

# Granting Operation-Level Permissions To Sub-Accounts

Last updated: 2025-02-06 10:29:28

## Overview

This article guides you on how to use a Tencent Cloud root account to grant operation-level permissions to sub-accounts. You can grant different read and write permissions to sub-accounts based on your actual needs.

## Directions

### Grant Full Read and Write Permissions

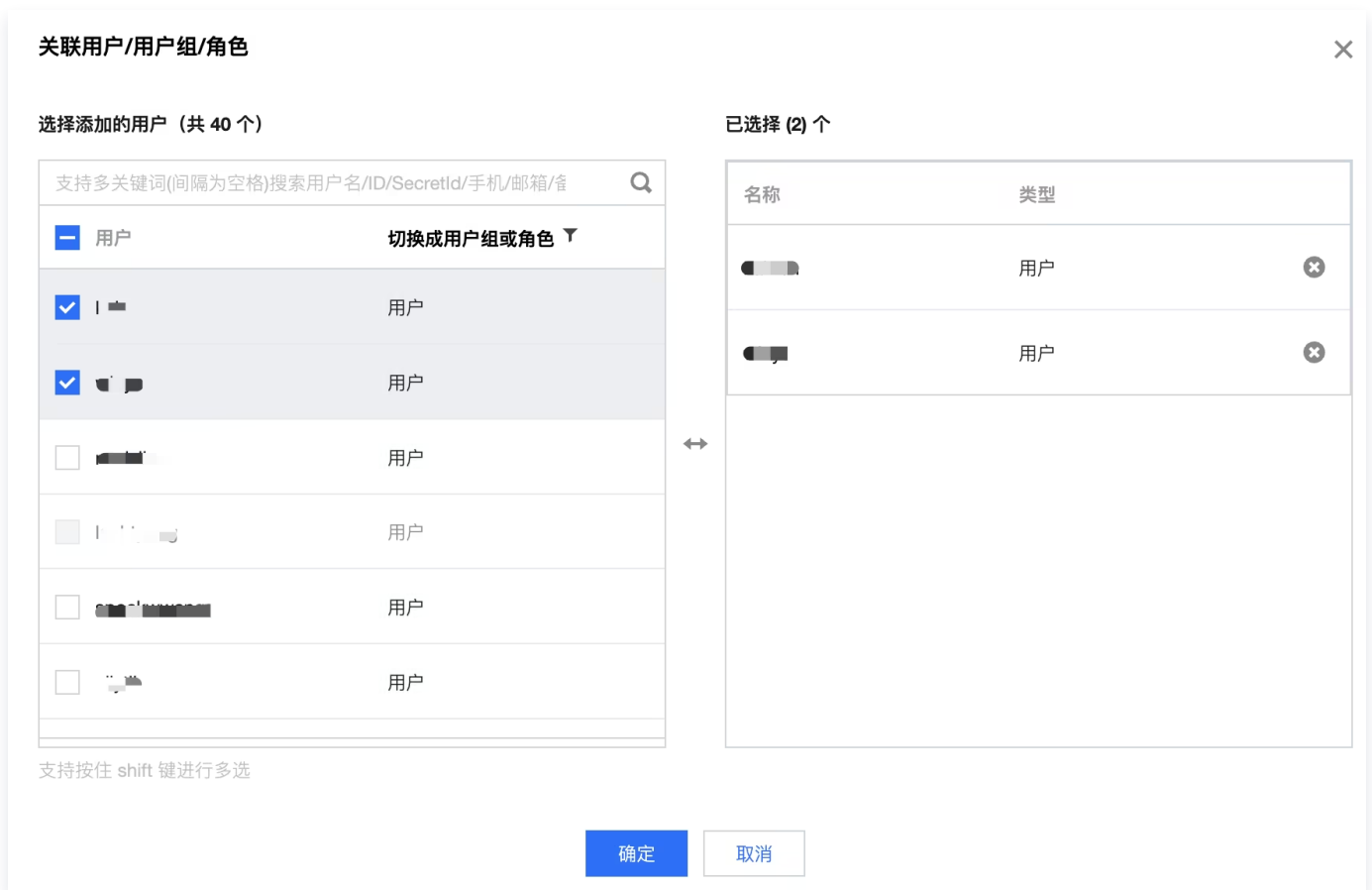
#### ! Description

After granting a sub-account full read and write permissions, the sub-account will have full read and write capability for **all resources** under the root account.

1. Log in to the [CAM Console](#) using the root account.
2. On the left sidebar, click **Policies** to enter the policy management list page.
3. In the Search Bar on the right, enter **QcloudTDMQFullAccess** to search.



4. In the search result, click **QcloudTDMQFullAccess's Associating a Users/Groups**, and select the sub-account to authorize.



5. Click **Yes** to complete the authorization. The policy will appear in the user's policy list.



## Grant Read-Only Permission

### Description

After granting a sub-account read-only permission, the sub-account will have read-only capability for **all resources** under the primary account.

1. Log in to the [CAM Console](#) using the root account.
2. On the left sidebar, click **Policies** to enter the policy management list page.

3. In the Search Bar on the right, enter `QcloudTDMQReadOnlyAccess` to search.



4. In the search result, click `QcloudTDMQReadOnlyAccess's` `Associating a Users/Groups`, and select the sub-account to authorize.



5. Click **Yes** to complete the authorization. The policy will appear in the user's policy list.

访问管理

- 概览
- 用户
- 用户列表**
- 用户设置
- 用户组
- 策略
- 角色
- 身份提供商
- 联合账号
- 访问密钥

访问方式 控制台访问 微信

标签 暂无标签

https://cloud.tencent.com/login/subAccount/... J02?type=su  
...&ername=kairren

权限 服务 组 (0) 安全 安全 API 密钥 小程序

权限策略

关联策略以获取策略包含的操作权限。解除策略将失去策略包含的操作权限。特别的，解除随组关联类型的策略是通过将用户从关联该策略的用户组中移出。

关联策略 解除策略

搜索策略

策略名	描述	关联类型	策略类型	关联时间	操作
<input type="checkbox"/> QcloudTDMQReadOnlyAccess	消息队列TDMQ只读访问权限	直接关联	预设策略	2023-03-23 19:01:34	解除

模拟策略

# Grant Sub-Account Resource-Level Permission

Last updated: 2024-10-14 16:30:57

## Overview

This task guides you to use the root account to grant resource-level authorization to sub-accounts, so that the sub-accounts can gain control over specific resources.

## Prerequisites

- You have a Tencent Cloud root account and have activated the Cloud Access Management (CAM) service.
- There is at least one sub-account under the root account, and authorization has been completed according to Sub-account Access Authorization.
- Have at least one Pulsar instance.

## Operation Steps

You can authorize the Pulsar resources owned by the root account to sub-accounts through the policy feature in the management console. The detailed steps for authorizing Pulsar resources to sub-accounts are as follows. This example uses authorizing a cluster resource to a sub-account, and the steps for other types of resources are similar.

### Step 1: Get the Pulsar Cluster ID

1. Log in to the [TDMQ for Apache Pulsar console](#) using the **root account**, select an existing cluster instance and click to enter the details page.
2. In the **basic info**, the field **ID** is the current Pulsar cluster ID.

集群信息		接入点		监控信息	
集群名称	test-doc	地域	广州	部署方式	单可用区
集群 ID	pulsar-xxxxxx	可用区	广州三区	说明	-
版本	2.9.2	资源标签	暂无标签		
状态	正常				
集群规格	PULSAR.P1.MINI2				
存储规格	600 GB				
创建时间	2023-11-16 11:13:54				

## Step 2: Create an Authorization Policy

1. Enter the [CAM console](#) and click [Policies](#) in the left sidebar.
2. Click **Create Custom Policy**, and select **Create by Policy Builder**.
3. In the visual policy builder, keep the **Effect** as **Allow**, enter TDMQ in the **Service** field to filter, and select **Message Queue TDMQ (tdmq)** from the results.



4. In **Operation**, select **All**. You can also choose the operation type according to your needs.

### ⓘ Note:

Some APIs temporarily do not support resource-level authorization; please refer to the console page for details. The list of APIs supporting resource-level authorization can be found in the appendix of this document.

1 编辑策略 > 2 关联用户/用户组/角色

可视化策略生成器 JSON

▼ 消息队列 TDMQ (全部操作)

效果 (Effect) *	<input checked="" type="radio"/> 允许 <input type="radio"/> 拒绝
服务 (Service) *	消息队列 TDMQ (tdmq)
操作 (Action) * <a href="#">收起</a>	<p><b>请选择操作</b></p> <p><input checked="" type="checkbox"/> 全部操作 (tdmq:*) <a href="#">展开</a></p> <p>添加自定义操作</p> <p><b>操作属性</b></p> <p><input checked="" type="checkbox"/> 读操作 (已选择16个) <a href="#">展开</a></p> <p><input checked="" type="checkbox"/> 写操作 (已选择66个) <a href="#">展开</a></p> <p><input checked="" type="checkbox"/> 列表操作 (已选择24个) <a href="#">展开</a></p>

5. In the **Resources**, select **Specific resources**, find Add six-segment resource description, and in the pop-up sidebar, fill in the **Cluster Prefix** and **Resource ID**. For the procedure, refer to [Step 1](#).

The screenshot displays the Tencent Cloud IAM console interface. On the left, a list of resources is shown with their corresponding actions and permissions. The 'cluster' resource is highlighted, and a red box around the '添加自定义资源六段式 来限制访问' link indicates the next step. On the right, the '添加资源六段式' (Add Resource Pattern) dialog box is open, showing the resource pattern 'qcs::tdmq::uin/100024981002:cluster/pulsar-bg5jika3dr'. The '资源前缀' (Resource Prefix) field is set to 'cluster', and the '资源' (Resource) field is set to 'pulsar-...'.

Resource	Action	Permission
exchange	为 DeleteAMQPExchange 外加 2 个操作指定 exchange 资源六段式 ①	添加资源六段式 来限制访问
environmentRoles	为 DescribeEnvironmentRoles 操作指定 environmentRoles 资源六段式	添加资源六段式 来限制访问
environmentRole	为 CreateEnvironmentRole 外加 3 个操作指定 environmentRole 资源六段式 ①	添加资源六段式 来限制访问
environmentId	为 DescribeEnvironmentAttributes 外加 1 个操作指定 environmentId 资源六段式 ①	添加资源六段式 来限制访问
environment	为 DescribeRocketMQEnvironmentRoles 外加 6 个操作指定 environment 资源六段式 ①	添加资源六段式 来限制访问
dlq	为 DescribeCmqDeadLetterSourceQueues 操作指定 dlq 资源六段式	添加资源六段式 来限制访问
consumer	为 ResetRocketMQConsumerOffset 操作指定 consumer 资源六段式	添加资源六段式 来限制访问
cmqtopic	为 DescribeCmqTopicDetail 操作指定 cmqtopic 资源六段式	此类型 添加资源六段式 来限制访问
cmqueue	为 DescribeCmqQueueDetail 外加 3 个操作指定 cmqueue 资源六段式 ①	添加资源六段式 来限制访问
clusterId	为 CreateRocketMQSmoothMigrationTask 操作指定 clusterId 资源六段式	添加资源六段式 来限制访问
cluster	为 DescribeAMQPCluster 外加 28 个操作指定 cluster 资源六段式 ①	添加资源六段式 来限制访问

条件 (Condition)  来源 IP ①  
添加其他条件

+ 添加权限

6. Click Next and fill in the policy name as needed.

7. Click **Select User** or **Select User Group** to choose the user or user group to grant resource permission.

1 编辑策略
>
2 关联用户/用户组/角色

---

### 基本信息

策略名称 \*

描述

### 关联用户/用户组/角色

将此权限授权给用户 [选择用户](#)

将此权限授权给用户组 [选择用户组](#)

将此权限授权给角色 [选择角色](#)

上一步
完成

8. Click **Complete**, and the sub-account granted resource permission will have access to the relevant resources.

## List Of APIs That Support Resource-Level Authorization

TDMQ for Pulsar supports resource-level authorization. You can grant a specified sub-account the API permission of a specified resource.

The list of interfaces that support resource-level authorization is as follows:

API Name	API Description	Resource Type	Six-Segment Example Of Resource
DescribeClusterDetail	Gets cluster details	cluster	qcs::tdmq:\${region}:uin/\${uin}:cluster/\${clusterId}
DescribeClusters	Gets cluster list	cluster	qcs::tdmq:\${region}:uin/\${uin}:cluster/\${cluster}
ModifyCluster	Modify cluster	cluster	qcs::tdmq:\${region}:uin/\${uin}:cluster/\${clusterId}

DeleteCluster	Delete cluster	cluster	qcs::tdmq:\${region}:uin/\${uin}:cluster/\${clusterId}
CreateRole	Creating role	cluster	qcs::tdmq:\${region}:uin/\${uin}:cluster/\${clusterId}
DeleteRoles	Delete role	cluster	qcs::tdmq:\${region}:uin/\${uin}:cluster/\${clusterId}
CreateEnvironment	Create Environment	cluster	qcs::tdmq:\${region}:uin/\${uin}:cluster/\${clusterId}
CreateTopic	Creating a Theme	environment	qcs::tdmq:\${region}:uin/\${uin}:environment/\${clusterId}/\${environmentId}
ModifyEnvironmentAttributes	Modify environment attributes	environment	qcs::tdmq:\${region}:uin/\${uin}:environment/\${clusterId}/\${environmentId}
DeleteEnvironments	Deleting an Environment	environment	qcs::tdmq:\${region}:uin/\${uin}:environment/\${clusterId}/\${environmentId}
DescribeEnvironments	Get environment list	environmentId	qcs::tdmq:\${region}:uin/\${uin}:environmentId/\${clusterId}/\${environmentId}
DescribeEnvironmentAttributes	Get environment attributes	environmentId	qcs::tdmq:\${region}:uin/\${uin}:environmentId/\${clusterId}/\${environmentId}
DescribeEnvironmentRoles	Get environment roles list	environmentRoles	qcs::tdmq:\${region}:uin/\${uin}:environmentRoles/\${clusterId}/\${environmentId}/\${roleName}
CreateEnvironmentRole	Create environment role authorization	environmentRole	qcs::tdmq:\${region}:uin/\${uin}:environmentRole/\${clusterId}/\${environmentId}/\${roleName}
DeleteEnvironmentRoles	Delete environment role authorization	environmentRole	qcs::tdmq:\${region}:uin/\${uin}:environmentRole/\${clusterId}/\${environmentId}/\${roleName}
ModifyEnvironmentRole	Modify environment	environmentRole	qcs::tdmq:\${region}:uin/\${uin}:environmentRole/\${clusterId}/\${environmentId}/\${roleName}

	role authorization		
DescribeMsg Trace	Message Trace	topic	qcs::tdmq:\${region}:uin/\${uin}:topic/\${clusterId}/\${environmentId}/\${topicName}
DescribeMsg	Message details	topic	qcs::tdmq:\${region}:uin/\${uin}:topic/\${clusterId}/\${environmentId}/\${topicName}
DescribeTopicMsgs	Message Query	topic	qcs::tdmq:\${region}:uin/\${uin}:topic/\${clusterId}/\${environmentId}/\${topicName}
DescribeTopics	Querying topic list	topic	qcs::tdmq:\${region}:uin/\${uin}:topic/\${clusterId}/\${environmentId}/\${topicName}
DescribeProducers	Get producer list	topic	qcs::tdmq:\${region}:uin/\${uin}:topic/\${clusterId}/\${environmentId}/\${topicName}
DeleteTopics	Delete topics in batches	topic	qcs::tdmq:\${region}:uin/\${uin}:topic/\${clusterId}/\${environmentId}/\${topicSets.topicName}
ModifyTopic	Modifying a topic	topic	qcs::tdmq:\${region}:uin/\${uin}:topic/\${clusterId}/\${environmentId}/\${topicName}
CreateSubscription	Create a subscription relationship for a topic	topic	qcs::tdmq:\${region}:uin/\${uin}:topic/\${clusterId}/\${environmentId}/\${topicName}
ResetMsgSubOffsetByTimestamp	Perform message backtracking based on a timestamp, accurate to the millisecond	subscription	qcs::tdmq:\${region}:uin/\${uin}:subscription/\${clusterId}/\${environmentId}/\${topicName}/\${subscriptionName}
DeleteSubscriptions	Delete a subscription relationship	subscription	qcs::tdmq:\${region}:uin/\${uin}:subscription/\${clusterId}/\${environmentId}/\${topicName}/\${subscriptionName}
DescribeRealTimeSubscription	Real-time consumption subscription list	subscription	qcs::tdmq:\${region}:uin/\${uin}:subscription/\${clusterId}/\${environmentId}/\${topicName}/\${subscriptionName}

DescribeSubscriptions	Consumption subscription list	subscription	qcs::tdmq:\${region}:uin/\${uin}:subscription/\${clusterId}/\${environmentId}/\${topicName}/\${subscriptionName}
ModifyRole	Modifies role	role	qcs::tdmq:\${region}:uin/\${uin}:role/\${clusterId}/\${roleName}
DescribeRoles	Gets the list of roles	role	qcs::tdmq:\${region}:uin/\${uin}:role/\${clusterId}/\${roleName}

## List Of APIs That Do Not Support Resource-Level Authorization

API Name	API Description
CreateCluster	Cluster Creation

# Grant Tag-Level Permissions To Sub-Accounts

Last updated: 2025-02-06 10:30:39

## Overview

This task guides you to use tag-based authentication to authorize sub-accounts for resources under a specific tag using the main account. The authorized sub-account will have control over resources with the corresponding tag.

## Prerequisites

- You have a Tencent Cloud root account and have activated the Cloud Access Management (CAM) service.
- There is at least one sub-account under the root account, and authorization has been completed according to Sub-account Access Authorization.
- Have at least one Pulsar cluster resource instance.
- Have at least one **tag**. If you don't have one, you can go to the [Tag Console](#) > **Tag List** to create a new one.

## Directions

You can grant sub-accounts read and write permissions for Pulsar resources tagged by the root account through the policy feature in the management console using **Tag-based Authorization**. Detailed steps for **Granting Resource Permissions to Sub-accounts by Tag** are as follows.

### Step 1: Binding a Tag To a Resource

1. Log in to the [TDMQ for Pulsar console](#) using the **root account** to enter the cluster management page.
2. Check the target cluster, click **Edit Resource Tags** at the top left, and bind resource tags to the cluster.

### 编辑标签 ×

标签用于从不同维度对资源分类管理。如现有标签不符合您的要求，请前往 [标签管理](#) 🔗

已选择 1 个资源

tag\_71730 ▼ num10233 ▼ ×

[+ 添加](#)

确定 取消

## Step 2: Authorization By Tag

1. Enter the [CAM console](#) and click [Policies](#) in the left sidebar.
2. Click **Create Custom Policy** and select **Tag-based Authorization**.
3. In the visual policy generator, enter tdmq in the **service** field to filter, select **TDMQ (tdmq)** from the results, and choose **operation** as **All**. You can also select the corresponding operations as needed.

### ⓘ Note:

Some APIs do not support tag authentication for the time being, which is subject to the console display.

← 按标签授权

1 编辑策略 > 2 关联用户/用户组/角色

可视化策略生成器 JSON

添加服务与操作 添加

▼ 消息队列 TDMQ (全部操作)

服务 (Service) *	消息队列 TDMQ (tdmq)
操作 (Action) *	全部操作 (*)

选择标签(resource\_tag) ⓘ

tag\_71730 num10233 ×

+ 添加

如现有标签不符合您的需求, 请前往标签控制台[新建标签](#)

下一步 字符数: 3220 (最多6144)

4. Click Next and fill in the policy name as needed.

5. Click **Select User** or **Select User Group** to choose the user or user group to grant resource permission.

1 编辑策略 > 2 关联用户/用户组/角色

### 基本信息

策略名称 \*

描述

### 关联用户/用户组/角色

将此权限授权给用户 [选择用户](#)

将此权限授权给用户组 [选择用户组](#)

将此权限授权给角色 [选择角色](#)

[上一步](#) [完成](#)

6. Click **Complete**, and the related sub-account will be able to control the resources under the specified Tag according to the policy.

## Unified Management Of Resource Tags

You can also manage resource tags uniformly in the [Tag console](#). Detailed steps are as follows:

1. Log in to the Tencent Cloud [Tag Console](#).
2. Select Resource Tags from the left navigation bar, choose the query condition as needed, and select **resource type** as **TDMQ > Cluster**.
3. Click **Query Resource**.
4. Check the required resources in the results, click **Editing Tags** to bind or unbind tags in bulk.

资源标签

资源标签使用指南

地域:

资源类型:

标签:  :  [删除](#)

[添加](#)

[查询资源](#) [重置](#) [更多查询条件](#)

[编辑标签](#) 已选择: 1/1  [Q](#) [设置](#) [下载](#)

<input checked="" type="checkbox"/>	资源ID	资源名称	云产品	资源类型	地域	标签总数
<input checked="" type="checkbox"/>	...	...	消息队列 TDMQ	集群	华南地区 (广州)	1

共 1 条 10 条 / 页 [<<](#) [<](#) [1](#) [>](#) [>>](#)

# Create Cluster

Last updated: 2025-02-06 10:10:35

## Overview

Cluster is a resource dimension in TDMQ for Pulsar, and namespaces, topics, and role permissions of different clusters are completely isolated from each other. Each cluster has its own resource limits, such as the total number of topics and message retention period. It is common for the development, test, and production environments to use their respective dedicated clusters.

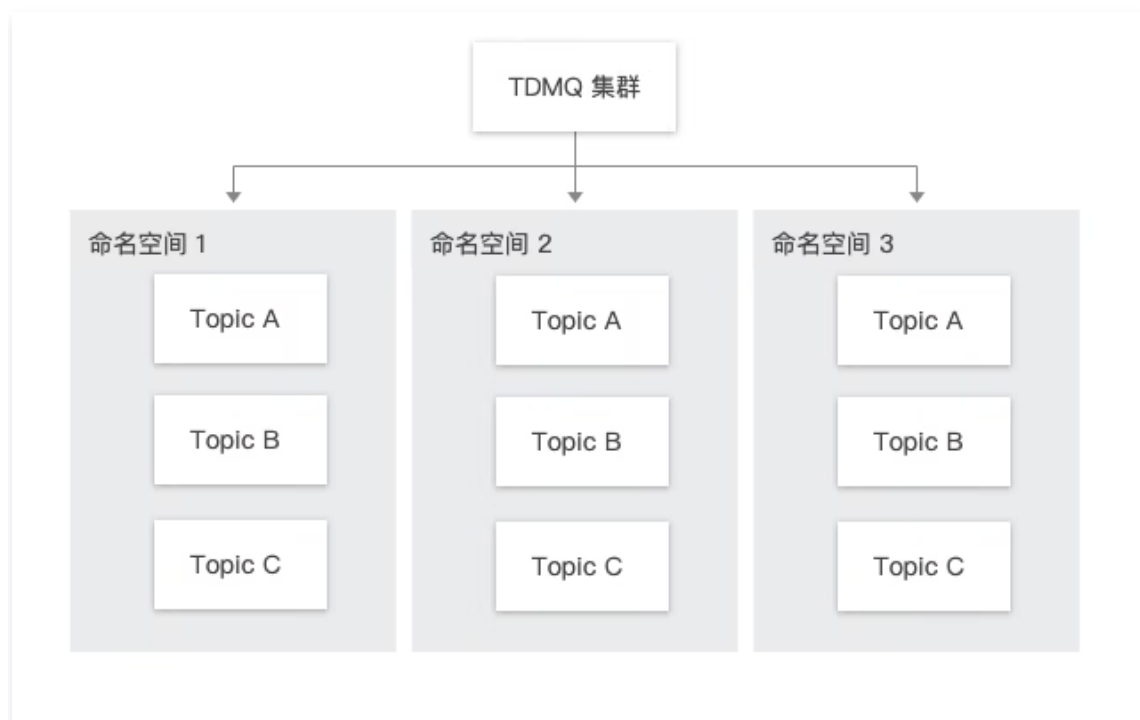
Clusters are divided into virtual clusters and professional clusters:

- **Virtual cluster:** Virtual computing and storage resources are used and automatically allocated based on usage. There are certain use limits. You don't need to pay for resources, and each user can create up to 5 virtual clusters.
- **Pro cluster:** Physical resources are exclusive, and data is secure. There are almost no use limits. Resource usage fees will be charged even if resources are idle.

### ⓘ Note:

Currently, clusters are available in multiple versions. For more information, see [Cluster Version Updates](#).

## TDMQ for Pulsar resource hierarchy



## Directions

### Creating a Cluster

1. Log in to the [TDMQ for Pulsar console](#) and enter the **Cluster Management** page.
2. On the **Cluster Management** page, after selecting a region, click **Create Cluster** to enter the new cluster dialog box.
3. In the new cluster creation dialog, select the desired cluster type and configure the relevant properties for the cluster:
  - **Cluster Type:** For the difference comparison between virtual clusters and pro clusters, please refer to [Product Selection](#).
  - **Billing Mode:** Virtual clusters support the pay-as-you-go mode, while pro clusters support the monthly subscription mode. For details, please refer to [Billing Overview](#).
  - **Region:** Select the region that is closest to your business. Cloud products in different regions are not interconnected via the intranet, and the region cannot be changed after purchase. Please select carefully; for example, a cloud server in the Guangzhou region cannot access a cluster in the Shanghai region via private network. If you need cross-region private network communication, see [Peering Connection](#).
  - **Deployment Method:** Pro clusters support deployment in three different AZs. This feature is in open beta and is currently free of charge. For details, please refer to [Multi-AZ Deployment](#).
  - **Cluster Specifications:** Select the appropriate cluster specifications based on your business needs. For configuration details of different cluster specifications, please refer to [Pro Cluster Specification](#).
  - **Storage Specifications:** Select the appropriate storage specifications based on your business needs. Pulsar pro clusters are deployed with 3 replicas by default.
  - **Virtual Private Cloud:** Bind the domain name of the new cluster's access point to the designated VPC.
  - **Public Network Access:** It is not enabled by default. To enable it, [submit an application](#). Once enabled, public network access cannot be disabled. We recommend you only enable this option for development and test clusters.
  - **Cluster Name:** Set the name of the environment, which supports digits, letters, and symbols "-\_=:.", and cannot exceed 64 characters.
  - **Resource Tag:** Set a resource tag. For more information, see [Tag Management](#).
4. Select **I have read and agree to the TDMQ Terms of Service**, and then click **Purchase Now**.
5. On the order payment page, click **Pay** and wait for 3–5 minutes to see the created cluster in the cluster management list.

**Note:**  
Each user can create up to 5 virtual clusters.

集群ID/名称	版本	状态	集群规格	网络	计费模式	资源标签	说明	操作
pulsar-test-dbc	2.9.2	正常	PULSAR.P1.MINI2	VPC 子网	包年包月 2023-12-16 11:22:44 到期			接入地址 续费 更多

## Next steps

1. Get the access address (connection information of the server).
2. Create a [Namespace](#) in the cluster.
3. Create a [Role](#) in the cluster and grant production and consumption permissions for the namespace.
4. Create a [Topic](#) in the namespace.
5. Write a demo as instructed in the [SDK Documentation](#) and configure the connection information and token for message production/consumption.

## Viewing Cluster Details

On the **Cluster Management** list page, click the ID of the target cluster to enter the cluster details page, where you can view the following information:

### Professional Cluster

Metrics	Description
Real-time production rate	The number of messages produced to the cluster per second at the current time.
Avg Message Size	Average size of message data (including message headers and bodies) in the selected time range.
Average Producti	Average number of messages produced to the cluster per second in the selected time range.

on Rate	
Average Consumption Rate	Average number of messages the cluster pushes to the client per second in the selected time range.
Cumulative Produced Messages	The number of messages produced to the cluster in the selected time range.
Storage Usage	Actual storage space consumed by message data as of the last time point of the selected time range (it changes only when the last time point changes).

- Basic information of the cluster: cluster name/ID, version, access address, region, cluster specification, billing mode, etc.

← 集群管理 / pulsar-██████████
集群类型说明 [🔗](#)

### 集群数据统计

近1小时
近6小时
近24小时
近3天
2023-11-24 14:48:11 ~ 2023-11-24 15:48:11 [📅](#)
🔄

实时生产速率	消息平均大小 <a href="#">?</a>	生产速率均值 <a href="#">?</a>	消费速率均值 <a href="#">?</a>	累计生产消息数 <a href="#">?</a>	存储使用 <a href="#">?</a>
— 条/秒	—	— 条/秒	— 条/秒	5 条	810B

基本信息
接入点
监控信息

### 集群信息 [编辑](#) [退还](#)

集群名称	test-dloc	地域	广州
集群 ID	pulsar-bg5jka3dr7b	部署方式	单可用区
版本	2.9.2	可用区	广州三区
状态	正常	说明	-
集群规格	PULSAR.P1.MINI2	资源标签	暂无标签 <a href="#">✎</a>
存储规格	600 GB		
创建时间	2023-11-16 11:13:54		

## Virtual Clusters

- **Cluster Statistics:** This section displays the average message size, production speed, and consumption speed, the number of produced messages, and the accumulative

storage duration in the selected time range.

**Note**

The statistics feature is not supported for clusters on v2.6.x.

Metrics	Description
Avg Message Size	Average size of message data (including message headers and bodies) in the selected time range.
Production rate	Average number of messages produced to the cluster per second in the selected time range.
Consumption rate	Average number of messages the cluster pushes to the client per second in the selected time range.
Message count produced	The number of messages produced to the cluster in the selected time range.
Actual storage consumption	Actual storage space consumed by message data as of the last time point of the selected time range (it changes only when the last time point changes).

- Basic information of the cluster: cluster name/ID, version, access address (available for clusters on v2.7.1 or later only), region, billing mode, creation time, description, resource tag.
- Cluster configuration:

集群概览 接入点

集群数据统计

近24小时 近3天 近7天 2023-11-23 15:40:56 ~ 2023-11-24 15:40:56

消息平均大小 生产速率 消费速率 生产消息数 实际存储消耗

- 条/秒 0 条/秒 0 条 408B

基本信息

名称 test-  
ID pulsar-  
版本 2.9.2  
VPC 内网接入地址 http://pulsar-...sap-8ywks40k.tdmq.ap-gz.qcloud.tencenttdmq.com:8080  
公网接入地址 http://pulsar-...sap-m3eissnp.tdmq.ap-gz.public.tencenttdmq.com:8080  
地域 广州  
计费模式 按量付费  
创建时间 2023-01-11 16:15:04  
说明  
资源标签 暂无标签

集群配置

单Topic分区生产 TPS 上限 5000条/秒  
单Topic分区消费 TPS 上限 10000条/秒  
单Topic分区生产带宽上限 50MB/s  
单Topic分区消费带宽上限 50MB/s  
最大命名空间数量 50 (已使用3/50)  
最大 Topic 数量 1000 (已使用3/1000)  
消息存储上限 100GB (配额已分配10.00%)  
保留时间上限 15天  
消息最长延时 10天

Cluster Configuration	Configuration Instructions
Max Production TPS for Single Topic Partition	Maximum messages per second that can be produced by a single topic partition.
Max Consumption TPS for Single Topic Partition	Maximum messages per second that can be pushed to the client by a single topic partition.
Max Production Bandwidth Per Topic Partition	Maximum size of messages per second that can be produced by a single topic partition.
Max Consumption Bandwidth for	Maximum size of messages per second that can be pushed to the client by a single topic partition.

Single Topic Partition	
Maximum Number of Namespaces	Maximum number of namespaces that can be created per cluster.
Maximum Number of Topics	Maximum number of topics that can be created per namespace.
Max Message Storage	Maximum disk capacity used by message heap. After this value is exceeded, new messages cannot be produced (under normal circumstances, there should not be too many retained messages; if this is not the case, check whether the business is consuming messages normally).
Retention time cap	Maximum message retention period that can be configured. A shorter period can be configured at the namespace level.
Max Message Delay	Maximum message consumption time delay.

## Getting Access Address

On the **Cluster Management** list page, click on the **access address** in the action column of the target cluster.

 **Note:**

A cluster can be configured with multiple access points. Currently, only VPC access is supported. For configuration details, see [VPC Access](#).

The screenshot shows the Tencent Cloud console interface for Pulsar cluster management. At the top, there are navigation tabs for '虚拟集群' (Virtual Cluster) and '专业集群' (Professional Cluster). Below the navigation, there is a search bar and a table of clusters. The table has columns for '集群ID/名称', '版本', '状态', '集群规格', '网络', '计费模式', '资源标签', '说明', and '操作'. One cluster is listed with ID 'pulsar-test-doc', version '2.9.2', status '正常', and specification 'PULSAR.P1.MINI2'. A modal window is open on the right, showing the 'API 调用地址' (API Call Address) section. It includes the VPC internal network address and the public network address, with a red arrow pointing to the public network address field.

集群ID/名称	版本	状态	集群规格	网络	计费模式	资源标签	说明	操作
pulsar-test-doc	2.9.2	正常	PULSAR.P1.MINI2	VPC 子网				接入地址 续费 更多

API 调用地址  
VPC 内网接入地址  
http://pulsar-...eap-  
qhqs5gwf.tdmq.ap-  
gz.qcloud.tencenttdmq.com:8080  
公网接入地址  
默认不开通公网访问, 如需开通请[提交申请](#)

## Pro Cluster Message Sending/Receiving Ratio Configuration

Configuration path: **Professional Cluster Details > Basic info > Cluster Configuration > Send/Receive Ratio Configuration**, click **Edit** in the upper right corner to configure.

The screenshot shows the '编辑配置' (Edit Configuration) dialog box. It contains the following configuration items:

- 集群规格: PULSAR.P2.MINI2
- 消息收发 TPS: 2000
- 峰值带宽: 45 MB/s
- 生产比例: 33 %  
生产 TPS 660, 峰值带宽 45 MB/s
- 消费比例: 67 %  
消费 TPS 1340, 峰值带宽 45 MB/s

At the bottom, there are two buttons: '确定' (Confirm) and '取消' (Cancel).

# Cluster Management

## Upgrading Cluster

Last updated: 2025-02-06 10:10:58

### Overview

If the current cluster specifications cannot meet your business needs, you can enhance your cluster and storage specifications in the console.

#### Note:

Currently, only professional clusters support cluster specification upgrades, while virtual clusters do not support upgrades. Theoretically, the upgrade process is seamless for business operations, but clients may experience disconnection and reconnection when the server-side rebalances topic traffic.

### Directions

1. Log in to the [TDMQ for Apache Pulsar console](#).
2. In the left sidebar, select **Pulsar > Cluster Management**. On the cluster management list page, find the target cluster and click **More > Upgrade** in the operating column.
3. After selecting the target cluster specifications, click **Confirm Adjustment**.

调整配置
×

当前配置

集群规格	存储规格	到期时间
PULSAR.P1.MINI2	200GB × 3	2023-12-16 11:22:44

目标集群规格

PULSAR.P1.MINI2	PULSAR.P1.SMALL4	PULSAR.P1.SMALL6	PULSAR.P1.SMALL10
PULSAR.P1.MEDIUM15	PULSAR.P1.MEDIUM20	PULSAR.P1.MEDIUM40	PULSAR.P1.MEDIUM60
PULSAR.P1.MEDIUM100	PULSAR.P1.LARGE150	PULSAR.P1.LARGE200	PULSAR.P1.LARGE400
PULSAR.P1.LARGE600	PULSAR.P1.LARGE1000		

PULSAR.P1.SMALL4 规格：支持规格内消息收发 TPS 总和 4000 次/秒，峰值带宽 90MB/s  
注：消息收发 TPS 能力按 4KB 大小为基准计算，涉及大消息、高级消息类型按对应比例折算。计费规则详情[参考链接](#)

目标存储规格

−

+
GB × 3

Pulsar 专业版集群默认 3 副本部署，存储费用将在单价基础上乘以 3

升配所需费用

确认调整
取消



# Return the Cluster

Last updated: 2025-02-06 10:11:17

## Overview

You can delete a TDMQ for Pulsar cluster when the user no longer needs it.

The lifecycle of a TDMQ for Pulsar cluster refers to the states it goes through from startup to release. Proper management of the cluster from startup to deletion ensures that applications running on the cluster can provide services efficiently and cost-effectively. The cluster has the following states:

State	Status Attribute	Status Descriptions
Creating	Intermediate status	The state after creating the cluster and before running.
Normal	Steady status	The normal running status of the cluster indicates that metrics such as node conditions and disk utilization are within the normal range.
Deleting	Intermediate status	Clusters are deleted by the console or through the API.
Isolated	Intermediate status	The cluster is in arrears and has entered a 7-day isolation state. Instances in isolation cannot produce or consume, and the data and configurations stored in the cluster will not be deleted.
Shipment failed.	Intermediate status	The cluster is successfully charged by the console or through the API, but the cluster allocation fails. If this happens, please contact <a href="#">Online Customer Service</a> for processing.
Deletion Failed	Steady status	The cluster is manually deleted or not renewed within 7 days after expiration, and the resource release of tdmq for pulsar fails.

## Directions

## Manual Deletion

For clusters that have not expired, you can choose to manually delete them. The steps are as follows:

1. Log in to the [TDMQ Pulsar console](#).
2. In the left sidebar, select **Pulsar > Cluster Management**. On the Cluster Management list page, click **More** in the operating column > **Return**.
3. In the confirmation popup for the destruction instance, check the return notice, and click **Return** to delete the cluster.

销毁实例
✕

您已选 1 个实例，[查看详情](#) ▲

No.	集群 ID	集群名称	操作
1	pulsar- <span style="background-color: #ccc; border: 1px solid #ccc; padding: 0 5px;"> </span>	te <span style="background-color: #ccc; border: 1px solid #ccc; padding: 0 5px;"> </span>	可销毁

销毁选中的 Pulsar 实例?

i • 销毁后所有数据将被清除且不可恢复，请提前备份数据。

• 资源销毁后，首个资源5天无理由退款金额退还至您的腾讯云账号。普通退款金额将按购买支付使用的现金和赠送金比例退还至您的腾讯云账户

• 若购买时享有折扣或代金券，折扣和代金券**不予退还**。

退还须知  已阅读同意退还/销毁操作须知 [🔗](#)

退还
取消

### ! Note:

All data will be cleared and cannot be recovered after destruction. Please back up your data in advance.

## Automatic Deletion Upon Expiration/Arrears

After an instance expires or enters into arrears, it will be retained in the console for up to 7 calendar days. If renewed within 7 days after expiration, it can continue to be used. For details, please refer to the [Payment Overdue](#).

If your tdmq for pulsar cluster has not been renewed 7 days after expiration (including the 7th day), the system will begin to release the resources at 00:00 on the 8th day after expiration, and the data in the expired instance will be deleted and cannot be recovered.

**Note:**

- Clusters in isolated status cannot produce or consume, and the data and configurations stored in the cluster will not be deleted.
- For clusters that have isolated status within 7 days, you can click Renew in the operation column on the cluster list page of the console. After the renewal is successful, the cluster can be restored to the running status and can be used normally.

# Tag Management

Last updated: 2025-02-06 10:32:05

## Overview

Tag is a key-value pair provided by Tencent Cloud to identify a resource in the cloud. It can help you easily categorize and manage TDMQ for Pulsar resources in many dimensions such as business, purpose, and owner.

### Description

Tencent Cloud will not use the tags you set, and they will only be used for your management of TDMQ for Pulsar resources.

## Use Limits

For tag usage limitations, see [Use Limits](#).

## Directions and Use Cases

### Use Case

A company has 6 TDMQ for Pulsar clusters on Tencent Cloud, with the department, business scope, and owner information as described below:

Queue ID	Department	Business Scope	Owner
pulsar-rgxj35jgo3d1	E-commerce	Marketing campaigns	Zhang San
pulsar-rgxj35jgo3d2	E-commerce	Marketing campaigns	Wang Wu
pulsar-rgxj35jgo3d3	Games	Game A	Li Si
pulsar-rgxj35jgo3d4	Games	Game B	Wang Wu
pulsar-rgxj35jgo3d5	Entertainment	Post-production	Wang Wu
pulsar-rgxj35jgo3d6	Entertainment	Post-production	Zhang San

You can add the following three tags to the pulsar-rgxj35jgo3d1 instance:

Tag Key	Tag Value
dept	ecommerce
business	mkt
owner	zhangsan

Similarly, you can also set appropriate tags for other resources based on their department, business scope, and owner information.

## Setting Tag In TDMQ For Pulsar Console

After designing the tag keys and values as detailed above, you can log in to the TDMQ for Pulsar console to set tags.

1. Log in to the [TDMQ for Apache Pulsar console](#).
2. On the Cluster Management list page, after selecting the region, check the clusters that need to be edited with tags, and click **Edit Resource Tags** at the top of the page.



3. Set tags in the "Edit Tags" window that pops up.  
For example, add three sets of tags to the cluster pulsar-rgxj35jgo3d1.

### 编辑标签 ✕

标签用于从不同维度对资源分类管理。如现有标签不符合您的要求，请前往 [标签管理](#) ↗

已选择 1 个资源

dept ▼

ecommerce ▼ ✕

business ▼

mkt ▼ ✕

owner ▼

zhangsan ▼ ✕

+ 添加

确定
取消

#### ! Description

If the existing tags cannot meet your needs, go to [Tag Management](#) to create more.

4. Click **OK**, and the system will prompt that the modification was successful. You can view the tags bound to the cluster in the Resource Tag column.

集群ID/集群名称	版本 <span style="font-size: small;">①</span>	健康度	说明	创建时间	操作
<input checked="" type="checkbox"/> pulsar-1	2.7.2	健康	<span style="font-size: small;">✎</span>	2021-10-11 11:06:36	<div style="font-size: small;"> <span style="color: #00aaff;">👁</span> 查看命名空间 <span style="color: #00aaff;">📍</span> 接入地址  <span style="color: #00aaff;">🗑</span> 删除         </div>

请输入关键词进行检索 🔍 ⚙️ ⬇️ ↻  
 business:mkt  
 dept:ecommerce  
 owner:zhangsan

## Filtering Resource By Tag Key

You can filter out clusters bound to a specific tag in the following steps:

1. Select **Tag** in the search box at the top-right corner of the page.
2. In the window that pops up after **Tag:**, select the tag you want to search for and click **OK** to search.

For example, if you select **Tag:** `owner:zhangsan` , you can filter out clusters bound to the

tag key `owner:zhangsan` .

集群ID/集群名称	版本	健康度	说明	资源标签	创建时间	操作
搜索“标签:owner:zhangsan”，找到 1 条结果 <a href="#">返回原列表</a>						
<input type="checkbox"/> pulsar-...	2.7.2	健康		3	2021-10-11 11:06:36	<a href="#">查看命名空间</a> <a href="#">接入地址</a> <a href="#">删除</a>

## Editing Tags

1. On the Cluster Management list page, after selecting the region, check the clusters that need to be edited with tags, and click **Edit Resource Tags** at the top of the page.

集群ID/集群名称	版本	健康度	说明	资源标签	创建时间	操作
<input checked="" type="checkbox"/> pulsar-...	2.7.2	健康		3	2021-10-11 11:06:36	<a href="#">查看命名空间</a> <a href="#">接入地址</a> <a href="#">删除</a>
<input checked="" type="checkbox"/> pulsar-...	2.7.2	健康	自动化测试使用, 会自动清理		2021-10-10 23:37:43	<a href="#">查看命名空间</a> <a href="#">接入地址</a> <a href="#">删除</a>
<input checked="" type="checkbox"/> pulsar-...	2.7.2	健康			2021-10-10 23:28:25	<a href="#">查看命名空间</a> <a href="#">接入地址</a> <a href="#">删除</a>
<input type="checkbox"/> pulsar-...	2.7.2	健康	自动化测试使用, 会自动清理		2021-10-10 23:18:02	<a href="#">查看命名空间</a> <a href="#">接入地址</a> <a href="#">删除</a>

### ! Description

Batch editing of tags is supported for up to 20 resources.

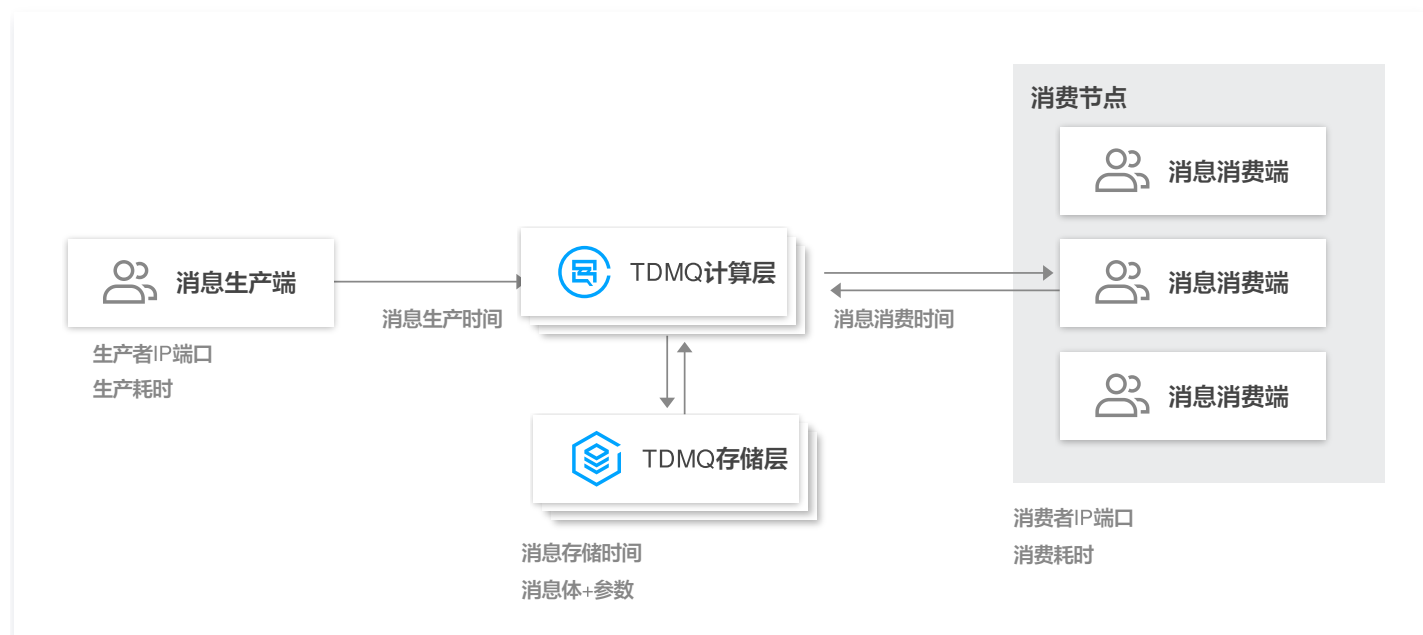
2. In the pop-up "Edit Tag" window, add, modify, or delete tags as needed.

# Message Query and Trace

Last updated: 2025-02-06 10:14:57

When a message is sent from the producer to the TDMQ for Pulsar server and then consumed by the consumer, TDMQ for Pulsar records the complete circulation process and displays it as a message trace in the console.

A message trace records the entire process in which the message is sent from the production side to the TDMQ for Pulsar server and eventually to the consumer end, including the duration of each stage (accurate down to the microsecond), execution result, producer IP, and consumer IP.



## Overview

When you need to troubleshoot the following issues, you can use the message query feature of the TDMQ for Pulsar console to view the specific content, parameters, and trace of a message by time dimension or based on the message ID found in the logs.

- Check the specific content and parameters of a message.
- Check the message is sent from which producer's IP, whether it was sent successfully, and when the message arrived at the server.
- Check whether the message has been persisted.
- Check which consumers have consumed the messages, whether the consumption was successful, and the specific time the messages were confirmed as consumed.
- Perform performance analysis of the distributed system and check the latency of MQ in processing related messages.

## Query Limitations

- Only the messages within the last 3 days can be queried.
- You can query up to 65,536 messages at a time.

## Prerequisites

You have already deployed the producer and consumer services by referring to the [SDK Documentation](#), and messages have been produced and consumed within the last 7 days.

## Operation Steps

1. Log in to the [TDMQ for Pulsar console](#) and click **Message Query** on the left sidebar.
2. On the Message Query page, first select the region and environment, then select the time range you wish to query. If you know the corresponding message ID, you can also enter the message ID for a precise search.
3. Click **Query**. The list below will display all the queried results in pages.

消息查询 广州 [消息查询说明](#)

时间范围: 近30分钟 近1小时 近6小时 近24小时 近3天 2023-04-28 15:04:56 ~ 2023-04-28 15:34:56

当前集群: [下拉菜单]

命名空间: ns1

Topic: topic1

消息 ID: 请输入消息 ID

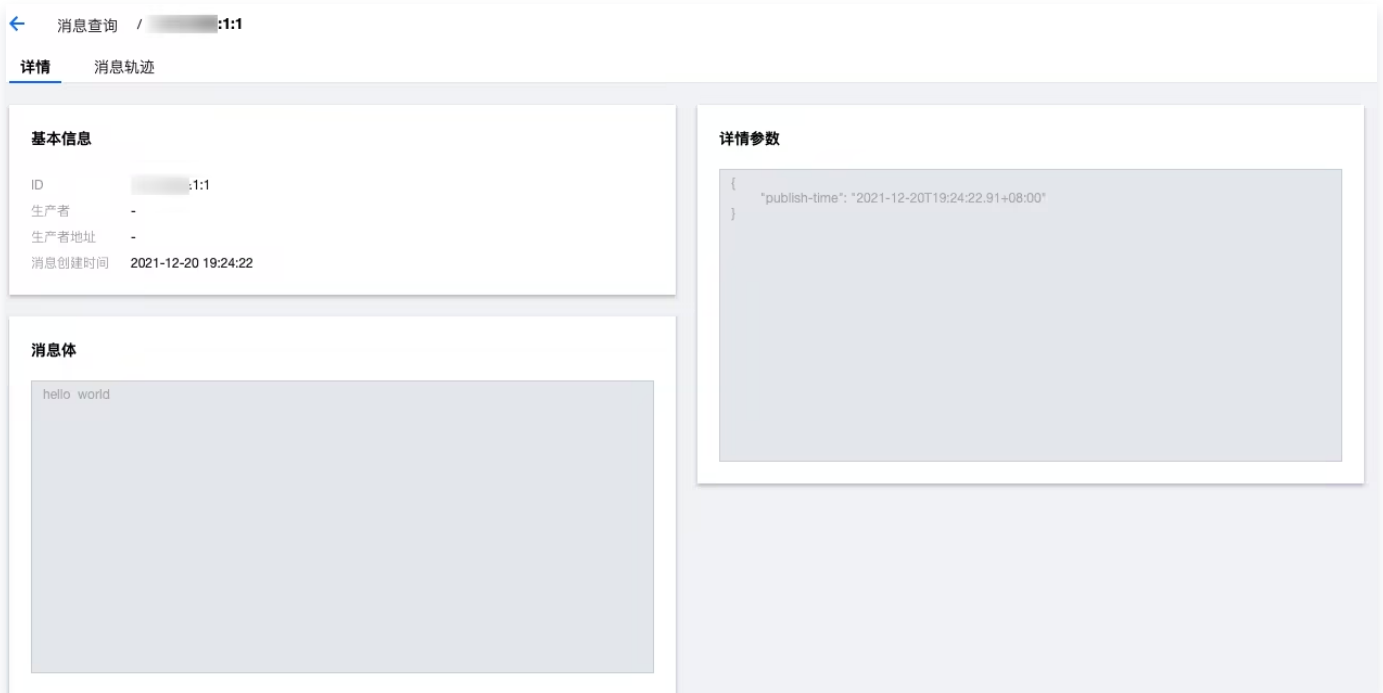
[查询](#)

消息 ID	生产者	生产者地址	消息创建时间	操作
23:1:1	pulsar-4 [redacted] -33	43.100.0.001749	2023-04-28 15:30:08,933	<a href="#">查看详情</a> <a href="#">查看消息轨迹</a>
23:0:1	pulsar- [redacted]	43.100.0.001749	2023-04-28 15:30:08,906	<a href="#">查看详情</a> <a href="#">查看消息轨迹</a>
18:0:1	pulsar- [redacted] 3	43.100.0.001749	2023-04-28 15:30:08,889	<a href="#">查看详情</a> <a href="#">查看消息轨迹</a>
21:2:0	pulsar-4 [redacted]	43.100.0.001757	2023-04-28 15:30:08,878	<a href="#">查看详情</a> <a href="#">查看消息轨迹</a>
21:1:0	pulsar- [redacted] 39	43.100.0.001757	2023-04-28 15:30:08,864	<a href="#">查看详情</a> <a href="#">查看消息轨迹</a>
21:0:0	pulsar-4 [redacted] 18	30 [redacted] 14	2023-04-28 15:17:01,933	<a href="#">查看详情</a> <a href="#">查看消息轨迹</a>

共 6 条 20 条 / 页 1 / 1 页

4. Find the message whose content or parameters you want to view, and click **View Details** in the Operation column to view the basic information, content (message body), and

parameters of the message.



消息查询 / [redacted]:1:1

详情 消息轨迹

**基本信息**

ID [redacted]:1:1  
生产者 -  
生产者地址 -  
消息创建时间 2021-12-20 19:24:22

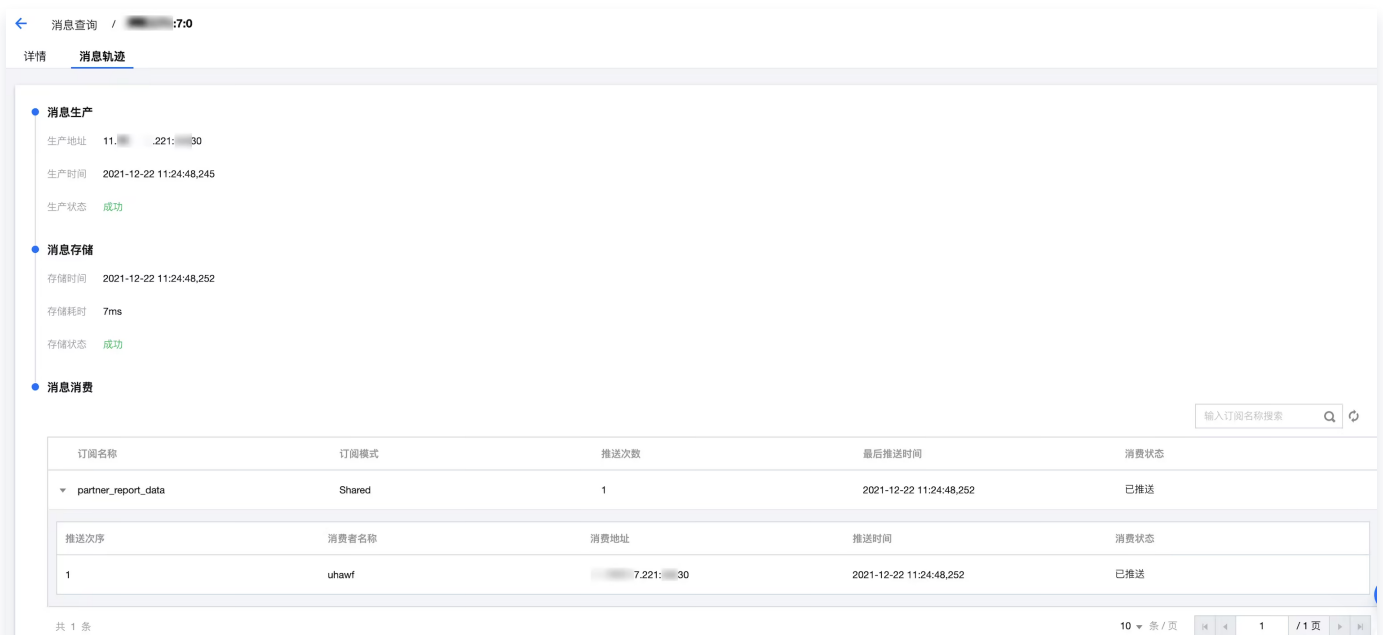
**消息体**

hello world

**详情参数**

```
{
  "publish-time": "2021-12-20T19:24:22.91+08:00"
}
```

5. Click **View Message Track** in the Operation column, or click **Message Track** in the Tab bar on the details page to view the track of the message (for details, see [Message Track Query Result Description](#)).



消息查询 / [redacted]:7:0

详情 消息轨迹

- 消息生产**
  - 生产地址 11.[redacted].221:[redacted]:30
  - 生产时间 2021-12-22 11:24:48.245
  - 生产状态 成功
- 消息存储**
  - 存储时间 2021-12-22 11:24:48.252
  - 存储耗时 7ms
  - 存储状态 成功
- 消息消费**

输入订阅名称搜索 🔍

订阅名称	订阅模式	推送次数	最后推送时间	消费状态
partner_report_data	Shared	1	2021-12-22 11:24:48.252	已推送

推送次序	消费者名称	消费地址	推送时间	消费状态
1	uhawf	[redacted]:7.221:[redacted]:30	2021-12-22 11:24:48.252	已推送

共 1 条 10 条 / 页 1 / 1 页

## Message Track Query Result Description

The queried message track is divided into three sections: message production, message storage, and message consumption.

## Message Production

Parameter	Description
Production Address	Address and port number of the producer.
Production Time	The time when the TDMQ for Pulsar server acknowledged message receipt, accurate down to the millisecond.
Production Status	Whether the message is produced successfully or failed. If the status is failed, it usually means that some header data of the message is lost during sending, and the above fields may be null.

## Message Storage

Parameter	Description
Storage Time	The time when the message was persistently stored (TDMQ for Pulsar currently adopts the strong consistency mode where messages will be acknowledged only after being stored, so the storage time is the same as the production time; if in high performance mode, they are different).
Storage Duration	The time from when the message was persistently stored to when the TDMQ for Pulsar server received the acknowledgment, accurate down to the millisecond.
Storage Status	Whether the message persistence succeeded or failed. If the status is failed, it means that the message fails to be saved to the disk, which may be caused by damage to the underlying disk or lack of spare capacity. In such a case, you need to submit a work ticket as soon as possible.

## Message Consumption

Message consumption is displayed in the form of a list. TDMQ for Pulsar supports multi-subscription mode, where a message may be consumed by multiple consumers in multiple subscriptions.

The description of information displayed in the list is as follows:

Parameter	Description
Subscription Name	The name of the subscriber.
Subscription Mode	Subscription mode, there are four types: shared/Key-shared/Exclusive/Failover. For details, please refer to <a href="#">Subscription Mode</a> .
Number of Pushes	Number of times the TDMQ for Pulsar server delivers the message to the consumer.
Last Push Time	Time when the TDMQ for Pulsar server delivered the message to the consumer the last time.
Consumption Status	<ul style="list-style-type: none"> <li>• Not Pushed: The tdmq for pulsar server has not yet delivered the message to the consumer.</li> <li>• Pushed: The tdmq for pulsar server has delivered the message to the consumer but has not received an ACK message from the consumer.</li> <li>• Confirmed: The consumer replies with an ACK message to the tdmq for pulsar server, and the server receives the ACK message.</li> </ul>

Click the right triangle icon on the left of the subscription name to view the details of each message pushed by the server.

Parameter	Description
Push Order	Number of times the TDMQ for Pulsar server delivers the message to the consumer.
Consumer Name	Namely the subscription name.
Consumption Address	Address and port number of the consumer that receives the message.
Push Time	Time when the TDMQ for Pulsar server delivers messages to the consumer.

**Push result**

- **Pushed:** The tdmq for pulsar server has delivered the message to the consumer but has not received an ACK message from the consumer.
- **Confirmed:** The consumer replies with an ACK message to the tdmq for pulsar server, and the server receives the ACK message.
- **Timeout not confirmed:** Timeout has occurred, and the server has not received any ACK message yet, so it sends the message again.

# Cross-Region Replication Feature Introduction

Last updated: 2026-03-17 11:32:14

## Requirement Scene

### Scenario 1: Different Location Disaster Recovery Scenario

Pulsar pro supports multi-AZ deployment, which means when you purchase a Pulsar cluster in a region with at least three AZs, you can select up to three AZs for multi-AZ deployment. Partition replicas of this instance will be forcibly distributed across the nodes in all AZs, ensuring that your instance can normally provide services even if it is unavailable in a single AZ. However, a 3AZ deployment in the same city does not meet the disaster recovery needs of financial customers, who require cross-region disaster recovery to quickly switch to a backup region in case of a regional disaster, ensuring business continuity.

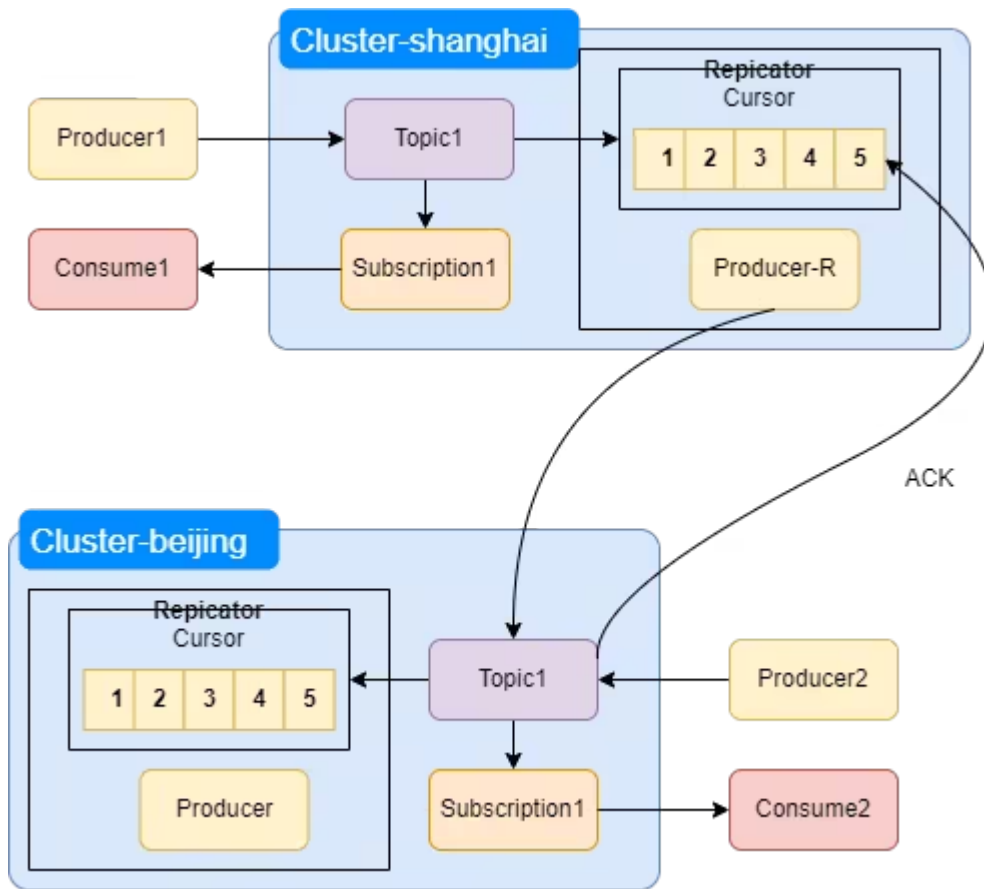
### Scenario 2: Global Data Archive Scenario

For a global team, business systems may be distributed across multiple regions worldwide, requiring global data cross-region transmission and unified data archiving. Data generated from multiple major cities globally is transmitted back to a data center in a specific region through cross-region replication and then archived uniformly. Since there may be topics with the same name in these regions, it is necessary to merge topics with the same name from multiple regions into a single topic in the target cluster.

Based on the above requirements, TDMQ for Apache Pulsar Professional Edition implements cross-region cluster replication based on the GEO Replication solution, supporting scenarios such as remote disaster recovery, global data archiving, and cross-region consumption.

## Introduction To the Technical Principles

After enabling cross-region replication in Pulsar, a Replicator will be started in the cluster. For details, refer to [Understanding Pulsar's Cross-Region Replication](#). Taking the replication from Shanghai region to Beijing region as an example, as shown in the figure below:



The Replicator component runs in the Pulsar cluster in the Shanghai region. This component will start Producer-R, which is bound to Topic1 of the peer cluster in the Beijing region, and sends message data to the Beijing data center as a producer.

#### Note:

- Messages produced in the Shanghai cluster are first persisted in the local cluster and then asynchronously forwarded to the Beijing cluster.
- The Producer-R in the Shanghai cluster Replicator has no relation to the client Producer1 in the same cluster. The cluster address configured for Producer-R is the Beijing cluster address.

### Replication Process Description

1. Producer1 produces messages to the Shanghai cluster Topic1.
2. The Shanghai cluster persists the messages to BookKeeper.
3. After BookKeeper returns success, the messages are pushed to the Replicator's Cursor.
4. The Cursor of the Replicator sends the messages to the Beijing cluster Topic1 through Producer-R.
5. After the Beijing cluster Topic1 writes to BookKeeper successfully, it replies with an ACK to the Cursor of the Shanghai cluster Replicator. Upon receiving the ACK, the Cursor in the Shanghai data center pushes the next message through Producer-R.

## Operation Guide

1. Create a dedicated cluster in the target replication region. On the cluster purchase page, you need to enable the **Cross-region Replication** switch and select the data source cluster.
2. Configure the cluster's metadata synchronization link through the console.
  - Replication Link Name: Define a name for the synchronization link.
  - Link type: Select message level.
  - Source cluster selection: Select the Pulsar cluster for the data source.
  - Target Cluster Selection: Choose the created target cluster in different regions, only clusters with the same "Cluster ID" will be displayed here.
  - Replication level: Supports three levels: cluster, namespace, and topic.
    - Cluster level, suitable for cluster-level replication.
    - Namespace level, suitable for scenarios where clusters in two locations are both active, with different namespaces distributed in different regions.
    - Topic level, the smallest granularity for cross-region replication.
3. After creation, the message-level copy task will enter the monitoring interface, where you can check data such as the actual replication rate and message backlog.

## Description

Message-level cross-region replication tasks incur fees, while metadata-level tasks do not. The console provides corresponding monitoring metrics to assist observation. For detailed billing information on cross-region message-level replication, see [Pro Cluster Billing](#).

## Use Limits

### 1. Feature Supported Scope

This feature is only supported by the Pro Cluster.

### 2. Link Replication Direction

Currently, cross-region replication, whether message level or metadata level, is one-way replication.

### 3. About Copying Objects

- Only one synchronization task can be created for the same object, including higher-level tasks.
- Deleting a topic in a sync link is prohibited; the sync link must be deleted first.

### 4. Coverage Issue

For existing resources with the same name but different configurations, such as partition count or TTL attributes, after creating a copy task, the policy for the target cluster is not to

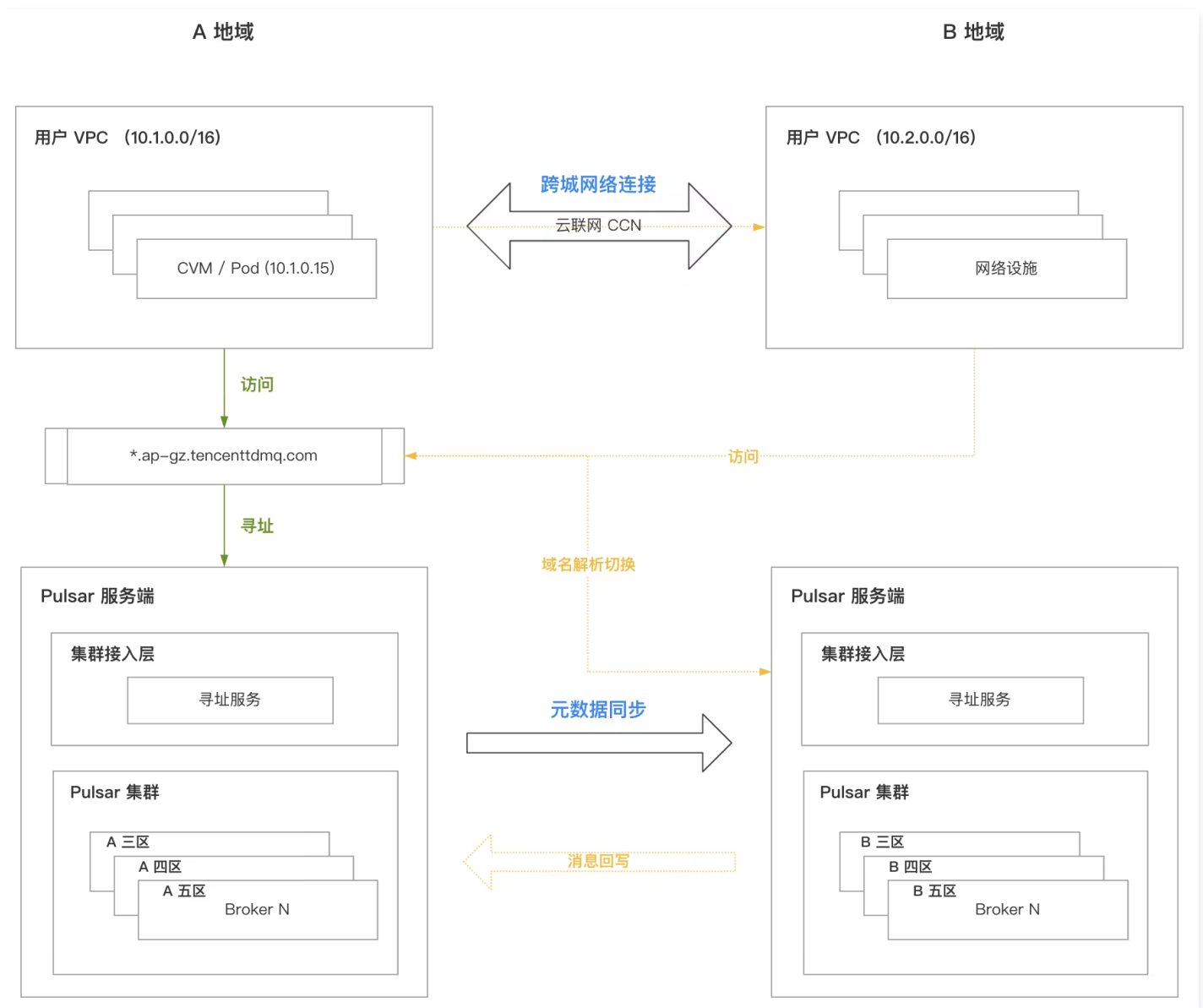
overwrite.

# Disaster Recovery Practice In Different Location

Last updated: 2025-02-06 10:21:39

## Remote Disaster Recovery

Message middleware is a crucial component in the technical architecture of business systems. TDMQ Pulsar itself supports multi-AZ disaster recovery capability. To address the need for customers to quickly migrate their business in the event of a regional disaster and ensure business continuity, a **cross-region disaster recovery** solution is introduced. The following introduces the cross-region disaster recovery solution.



In normal scenarios, the business in region A accesses the Pulsar Server-side. Users need to complete two main actions:

1. Cross-city network connectivity is established through [Cloud Connect Network \(CCN\)](#) to connect cross-region VPC networks.
2. Metadata synchronization is achieved through the Pulsar console to synchronize cluster metadata between two locations, including namespaces, topics, subscriptions, roles, etc.

When an exception occurs, the TDMQ Pulsar console provides a domain name resolution switch feature, redirecting the domain originally used in region A to the target disaster recovery cluster in region B. This avoids the need for clients to modify the access point address and ensures the continuity of the business by implementing the disaster recovery solution in region B.

After the exception in region A is recovered, users first need to determine whether to write back the messages generated in region B to region A to ensure message integrity. If writeback is needed, please contact our after-sales team for assistance. Then, users should switch back the domain resolution of the operation access point in the cluster of region B. After the switch back, clients can normally access region A.

## Operation Guide

### Disaster Recovery Feature Launch Configuration

1. In the backup region, create a professional cluster. In the cluster purchase interface, enable the **Cross-Region Replication** switch and select the cluster to be backed up.
2. Configure the cluster's metadata synchronization link through the console.
  - Replication Link Name: Define a name for the synchronization link.
  - Link Type: Select metadata.
  - Source Cluster Selection: Select the Pulsar cluster for disaster recovery backup.
  - Target cluster selection: Choose the created disaster recovery cluster in different regions, where only clusters with the same "Cluster ID" will be displayed.
  - Replication Level: Supports cluster-level and namespace-level.
    - Cluster-level, suitable for cluster-level cold backup.
    - Namespace-level, suitable for scenarios where clusters in two locations are both active, with different namespaces distributed in different regions, and regions act as primary/secondary for each other.

### Cloud Network Interconnection

Based on [CCN](#), connect the production region and backup region networks to establish a network access channel. This allows clients in the production region to access the backup cluster across regions during a disaster.

For configuration details, refer to the CCN [Operation Guide](#) and perform the following operations:

1. [Creating a CCN Instance](#)
2. [Associating a Network Instance](#)

## During a Disaster

User decision, client access switches to the backup region:

1. Initiate domain resolution switch through the console (if available).
2. If the console is unavailable, customers can contact the after-sales architect to initiate the switch from the TDMQ service side.

## After Disaster Recovery

User decision, client access switches back to the original region cluster:

1. Users determine whether message write-back is needed. If write-back is required, please contact our after-sales team for assistance.
2. The console initiates domain switching back, and clients can access the original region normally.

## Notes

### 1. Supported Scope

This feature is only supported by professional clusters.

### 2. Message Writeback

Message write-back is a pre-judgment when users switch traffic back to the original region, aiming to avoid data loss and ensure data integrity. Please make sure to decide whether to write back before performing the domain name switch-back.

User-provided information:

- List of Topics to be migrated, such as: cluster ID, namespace, or specific Topic list.
- Start time and end time, messages sent within this time range in the Topic are data to be migrated, with reference to the `publishTime` field in the message header.

Impact of message write-back:

- A large number of duplicate messages, the server-side will not consider the complex status machine of location synchronization between the source cluster and the target cluster, and all migrated messages will be treated as new messages. Even if the historical data already contains the same message, it will be treated as two different messages. If duplicate messages have some impact on the business, it is recommended that the client perform [idempotent processing](#).

- Fewer disordered messages.

### 3. About Roles

Under the source cluster, at least one role is required, which can be unbound from the namespace. The goal is to ensure that the role and token remain consistent with the disaster recovery cluster during synchronization.

### 4. Configuration Of CCN

When configuring CCN, the VPC CIDRs created in the two regions need to not overlap. For example: Guangzhou 10.0.0.0/16 and Shanghai 10.1.0.0/16. This way, CCN can connect these two VPCs (IP addresses will not conflict).

### 5. Effective Time Of Domain Name Switch

The effective time for domain name switch is about 5 seconds to 5 minutes, including two parts: domain name resolution switch and client disconnection and reconnection to the new cluster's broker.

### 6. After Switch During Disaster

In the event of a disaster, after traffic is switched to the disaster recovery cluster, avoid changing metadata in the backup cluster, such as namespace attributes and creating new topics.

# Cluster Migration

## Single Write Multi-Read Migration Solution

Last updated: 2025-02-06 10:24:08

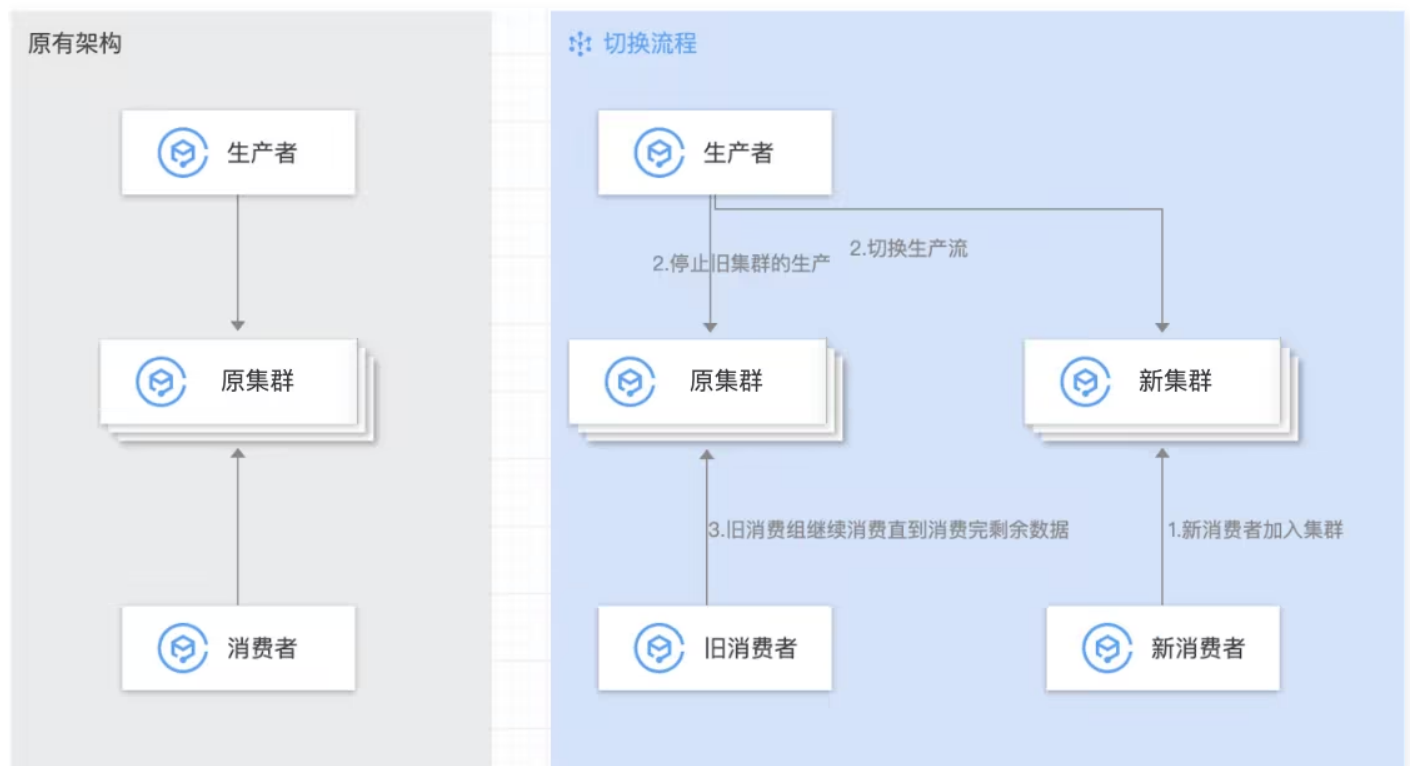
This document provides an overview of feasible solutions for migration between different clusters. You can choose the migration solution that suits your business scenario.

### Applicable Scenario

1. Unable to migrate by virtual cluster dimension.
2. Hope to migrate resources under a virtual cluster to different professional clusters.
3. Migrate self-build Pulsar to Tencent Cloud Pulsar.

### Single-Write-Multiple-Read Solution

This solution is simple, clear, and easy to implement, with no data backlog for smooth transition. Users can more flexibly control the resource granularity and grayscale method of the migration under this solution.



### Migration Process

1. Start business consumers connecting to the new cluster access point (dual-read, with consumers consuming data from both the old and new clusters).
2. Modify the access point address of the original producer to the new cluster and restart, so that new messages are produced to the new cluster until all original cluster producers are modified/closed (cut-write, switching production flow from the old cluster to the new cluster).
3. Monitor the message backlog of the original cluster.
4. When there is no backlog in the original cluster, you can close the consumers of the old cluster. At this point, the business has migrated to the new cluster (single-read, consumers only consume from the new cluster).
5. Migration completed, delete the old cluster.

# Cluster Migration Capability Description

Last updated: 2025-02-06 10:24:49

## Applicable Scenario

To meet user needs in different scenarios, TDMQ Pulsar offers two product forms: **Pro Cluster** and **Virtual Cluster**.

Due to the stability risk of virtual clusters, we stopped adding new ones in 2023. Pro Clusters have stronger product capabilities and a more comprehensive console (manage, renew, scale-out, etc.). To provide better service, for your existing **Virtual Clusters**, we offer smooth migration between clusters, supporting the smooth migration of **Virtual Clusters** to **Pro Clusters**.

## Capability Description

The data plane migration process of clusters is almost transparent to users, meaning the migration process is smooth (no need to adjust access points, no need to modify user business code).

Migration Process:

1. The system will deduct based on the Pro Cluster specification. When the migration starts, you can see the deduction status as processing on the order page; during the migration, if any issue occurs and a rollback happens, the order will be automatically refunded; after the migration is complete, the order status will be complete and the timing will officially start.
2. On the console **Pro Cluster** list page, you can see the information of the migrated cluster and perform subsequent operations such as management, upgrade, and renewal.

## Smooth Prerequisite

Smooth migration has a **prerequisite**: some access point addresses, due to early cluster creation or special network connections, cannot be smoothly migrated to the new cluster. Therefore, users need to provide the access point address information in use to confirm feasibility.

## Possible Issues

### 1. Message repetition issue

Progress synchronization through individual ack has been implemented to minimize the number of duplicate messages during migration. However, duplicates during migration may

not be completely avoided, usually within 1 minute. Users should prepare for idempotent processing in advance if needed.

## 2. Message disordered

A common issue with cluster migration is that disorder during the migration process cannot be completely avoided, regardless of the solution. Users need to be informed in advance.

## 3. Monitoring Data

Switching clusters may cause momentary inaccuracies in monitoring data, usually recoverable within 1–2 minutes.

## 4. Generation time jitter

Switching clusters may cause brief production latency fluctuations, similar to those during cluster upgrades, usually recoverable within 1 minute.

## 5. Message trace

During data synchronization, consumption progress messages will be generated. Users will see these messages when using message query. Querying message details during the migration process may be affected, and it may be impossible to view them.

## 6. Migration duration

The entire migration time is related to the number of namespaces, production flow, and the data volume of message storage. For one namespace with 1000 TPS and 100G message storage, cluster migration can usually be completed within 1 hour. For larger data volumes, such as 1T storage, it takes about 2 hours.

## 7. Old cluster retention time

After the migration is completed, Tencent Cloud's R&D side will wait for 1–3 days before clearing the resources on the old physical cluster. After clearing, rollback will no longer be possible.

## 8. Message backlog issue

The synchronization of consumption progress during the migration process is done through the user's topic, so there will be some internal messages in the user's topic. These messages will be filtered out on the server-side during consumption, and the business will not actually consume these messages. For subscriptions without consumers, message backlog will occur.

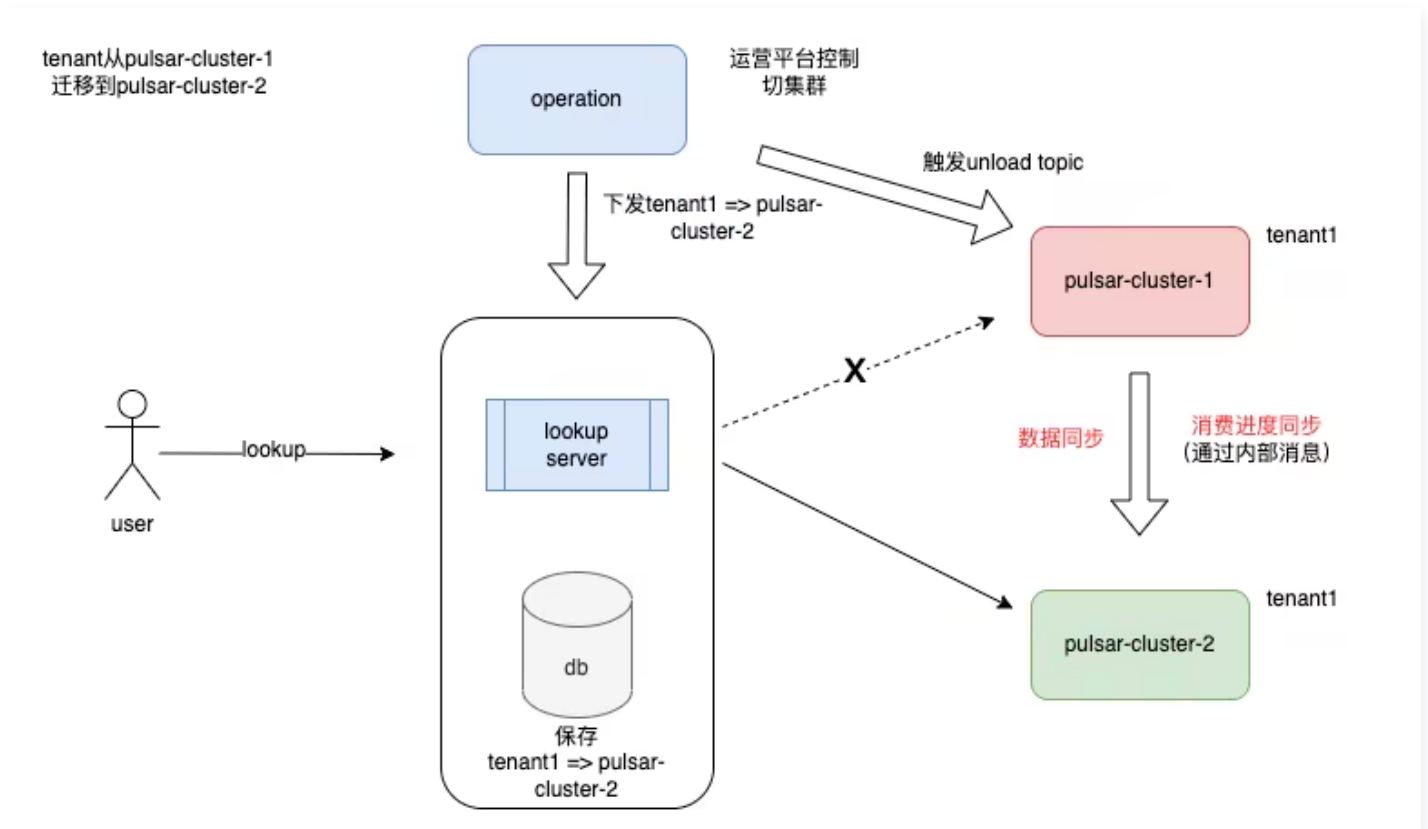
## 9. Message replication scope

During the message replication process, due to Pulsar's implementation mechanism, only messages within the TTL range of the old cluster can be replicated to the new cluster. If your message retention time is relatively large and you need to synchronize data within the retention time range, you need to adjust the TTL configuration first.

# Migration Principle

## Technical Solution

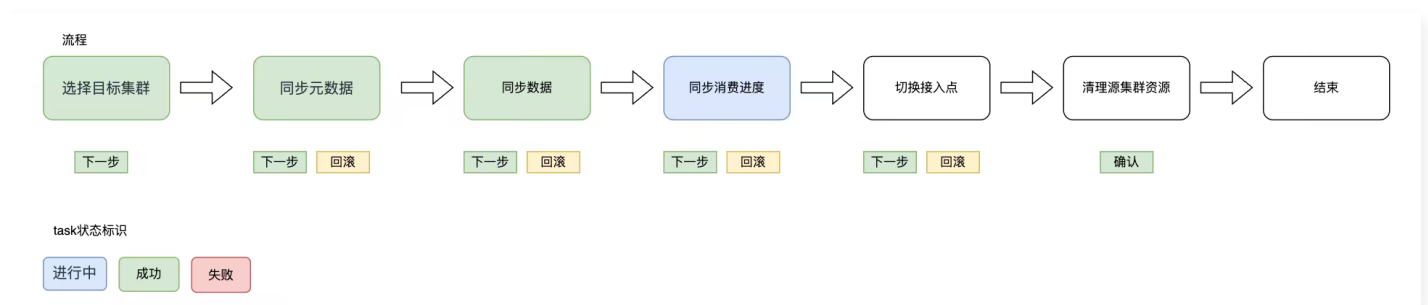
Using the Pulsar Geo Replication solution, enabling cross-cluster bidirectional replication can achieve data and message progress synchronization to meet the needs of cluster migration.



## Main Migration Process

The main migration process is shown in the figure below. After each process is successful, it proceeds to the next step. If the process fails, it can also be rolled back.

Before resource cleanup, the entire cluster migration process can be rolled back, and the old cluster can continue to provide services.



1. You agree on a migration plan with us, the platform initiates the shipment, and you start building the new professional cluster after the payment order.
2. Cluster metadata synchronization, including namespace, topic, subscription, role, and namespace policies.
3. Enable cross-cluster data sync.

4. Switch clusters, the operation platform issues a tenant cluster switch command, actively triggers the unload of topics on the old cluster, triggers client lookup, and the lookup phase returns the new cluster address information.
5. After confirming the user data migration is successful, disable cross-cluster data sync and clear the old cluster resources.
6. You can see the new cluster in the console.

# Monitoring and Alarms

## Monitoring Alarm Practices

Last updated: 2026-03-17 11:33:40

Based on the [Pro Cluster Specification](#) and [Use Limits](#) provided by the product, here are some suggested indicators and alarm items for your reference.

### Core Metrics and Impact

Dimensions	Alarm Items	Configuration Suggestion	Limit Exceeding Influence
Topic	Percentage of message backlog quota used	80%	Send failure occurs after exceeding the limit, and the client repeatedly reconnects.
	Percentage of message production entries quota used	80%	Default single partition 5000 TPS, after exceeding the limit, the server-side will delay the return, and the client sending duration will increase.
	Percentage of message production flow quota used	80%	Default single partition 40 Mbps, after exceeding the limit, the server-side will delay the return, and the client sending duration will increase.
	Percentage of message consumption entries quota used	80%	Default single partition 5000 TPS, after exceeding the limit, message backlog may occur due to rate limit.
	Percentage of message consumption flow quota used	80%	Default single partition 40 Mbps, after exceeding the limit, message backlog may occur due to rate limit.
	Number of Producers	800	Default single partition producer quantity cap 1000, after exceeding

			the limit, new producers cannot be created.
	Number of Consumers	1500	Default single partition consumer quantity cap 2000, after exceeding the limit, new consumers cannot be created.
Subscription	Percentage of number of unconfirmed messages quota used	80%	Default single subscription single partition 5000, after exceeding the limit, the server-side will stop pushing messages until the client confirms the unacknowledged messages.
	Number of Consumers	800	Default single subscription single partition consumer quantity cap 1000, after exceeding the limit, new consumers cannot be created.
Instance	[Professional Version] Professional cluster fixed storage usage	80%	Send failure occurs after exceeding the limit, and the cluster cannot write.
	[Professional Version] Pulsar cluster TPS usage percentage	80%	Exceeding the limit will cause the cluster to run under high load, posing a stability risk.
	[Professional Version] Number of limited write requests per minute per tenant due to traffic throttling	1	After traffic throttling occurs, the server-side will delay the response, leading to increased send duration.

# Cluster Monitoring

Last updated: 2025-02-06 10:25:23

## Overview

TDMQ for Pulsar supports cluster monitoring, including cluster compute metrics, storage metrics, and statistical distribution of message size. You can analyze cluster usage based on these monitoring data and address potential risks in a timely manner. You can also set alarm rules for monitoring items to receive alarm messages in case of any data exception, promptly handle risks, and ensure the stable operation of the system.

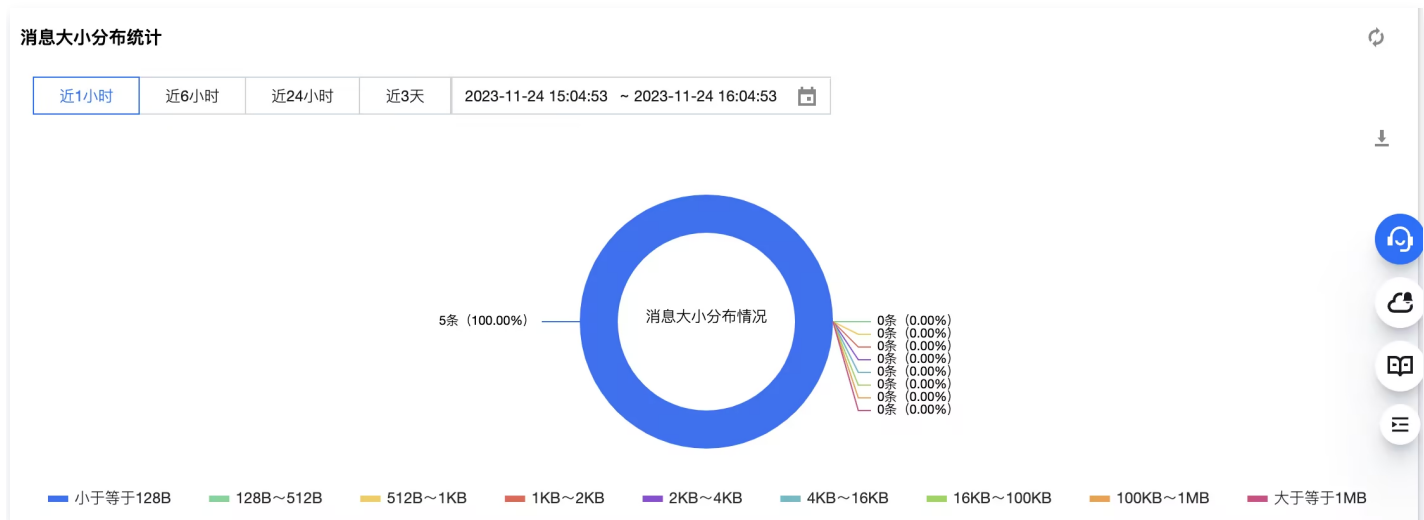
## Monitoring Metrics

The cluster monitoring metrics supported by TDMQ Pulsar Edition are as follows:

### Key Indicator Monitoring

Metric Type	Metrics	Unit
Compute Metrics	Pulsar Cluster TPS	Count/s
	Production TPS peak value	Count/s
	Consumption TPS peak value	Count/s
	Production bandwidth cap	Bytes/s
	Consumption bandwidth peak	Bytes/s
Storage metrics	Storage Usage	Bytes

### Message size distribution statistics



## Viewing Monitoring Information

1. Log in to the [TDMQ for Apache Pulsar console](#).
2. On the **Cluster Management** page, click the target cluster "ID" to enter the basic information page.
3. Select the **Monitoring Information** tab, choose the time range and time granularity to view cluster monitoring data.

# Topic Monitoring

Last updated: 2025-02-06 10:25:43

## Overview

TDMQ for Pulsar allows you to monitor the topic resources created under your account, so that you can keep track of the status of your topics in real time and troubleshoot possible issues to ensure stable business operations.

This document introduces the methods to view monitoring metrics and their meanings in the console.


## Descriptions Of Monitoring Metrics

The topic monitoring metrics supported by TDMQ for Pulsar are as follows:

Metrics	Description
Production rate (Count/s)	Number of messages sent to the topic by producers per second in the selected time range.
Consumption rate (Count/s)	Number of messages consumed by all consumers under the topic per second in the selected time range.
Production flow (Bytes/s)	Data size of messages sent to the topic by producers per second in the selected time range.
Consumption traffic (Bytes/s)	Data size of messages consumed by all consumers under the topic per second in the selected time range.
Size of heaped messages (Bytes/s)	Size of heaped messages.
Number of producers (Count)	Number of producers producing messages to the topic.
Number of consumers (Count)	Number of subscribers to the topic.

## Viewing Monitoring Information

1. Log in to the [TDMQ for Apache Pulsar console](#).
2. On the left sidebar, click **Topic Management** and select the region, cluster, and namespace.

3. In the topic list, find the target topic, click the icon in the **Monitoring** column , select the time range and granularity, and you can view the topic monitoring data.

# Configuring Alarm

Last updated: 2026-03-17 11:30:56

## Overview

Tencent Cloud provides the Tencent Cloud Observability Platform (TCOP) feature for all users by default; therefore, you do not need to manually activate it. TCOP will start collecting monitoring data only after a Tencent Cloud product is used.

TDMQ Pulsar Edition supports monitoring resources created under your account, helping you to monitor resource status in real-time. You can configure alarm rules for monitoring metrics. When a monitoring metric reaches the set alarm threshold, TCOP can notify you via email, SMS, WeChat, phone calls, etc., helping you respond promptly to abnormal situations.

## Directions

### Alarm Rule Configuration

The created alarm can determine whether an alarm notification should be sent based on the comparison between the monitoring metric and the given threshold in the selected time period. When the status of TDMQ Pulsar Edition changes, triggering an alarm, you can promptly take preventive or remedial measures. Creating alarms effectively can help enhance the robustness and reliability of your application.

#### Note:

Be sure to configure alarms for your instance to prevent exceptions caused by traffic spikes or specification limits.

1. Log in to the [TCOP console](#).
2. Select **Alarm Management > Policy Management** on the left sidebar, and then click **Create**.
3. On the alarm configuration page, select a policy type and instance, and set the alarm rule and notification template.
  - **Policy Type:** Select **Message Queue TDMQ/Pulsar**.
  - **Alarm Object:** Select the TDMQ for Pulsar resource for which to configure the alarm policy.
  - **Trigger Condition:** Supports **Select Template** and **Manual Configuration**, with the latter selected by default. For manual configuration, see the instructions below. To create a new template, see [Create Trigger Condition Template](#).
    - **Metric:** For example, if you select 1 minute as the statistical period for the "Tenant-level Message Production Rate" metric, then if the tenant-level message

production rate exceeds the threshold for N consecutive data points, an alarm will be triggered.

- **Alarm Frequency:** For example, Alarm once every 30 minutes means that there will be only one alarm triggered every 30 minutes if a metric exceeds the threshold in several consecutive statistical periods. Another alarm will be triggered only if the metric exceeds the threshold again in the next 30 minutes.

- **Notification Template:** Choose a notification template or create a new one. Set the alarm recipient objects and receiving channels.

4. Click **Complete** to complete the configuration.

For more information about alarms, please see [Tencent Cloud Observability Platform Alarm Service](#).

## Create a New Trigger Template

1. Log in to the [TCOP console](#).
2. On the left sidebar, click **Alarm Management > Alarm Configuration > Trigger Condition Template** to enter the trigger condition list page.
3. On the trigger condition template page, click **Create**.
4. On the template creating page, configure the policy type.
  - **Policy Type:** Select **Message Queue TDMQ/Pulsar**.
  - **Use preset triggers:** Select this option and the system recommended alarm policy will appear.
5. After confirming everything is correct, click **Save**.
6. Return to the alarm policy creating page and click **Refresh**. The alarm policy template just configured will appear.

# Connecting To External Monitoring Prometheus

Last updated: 2025-02-06 10:26:31

TDMQ Pulsar supports integrating the monitor data of professional clusters into user-built Prometheus, making it easier for users to observe the operation of message queue clusters. At the same time, users can use Prometheus monitoring data to perform timely HPA on business workloads, making overall online Ops more automated.

## Advanced usage:

- The standard Prometheus monitoring format allows you to use your own Prometheus to capture data through the Exporter we provide.
- For example, configure the Prometheus data source through Grafana, and K8s captures Prometheus data for Workload HPA, etc.

### Note:

If your dedicated cluster was created before March 25, 2024, please contact us to enable this feature by upgrading the cluster.

## User Guide

1. Log in to the [TDMQ for Pulsar Professional Cluster console](#).
2. In the left navigation bar, select **Cluster Management**, click the "ID" of the target instance to enter the instance basic information page.
3. Click to enter the **Monitoring Information** sheet.
4. In the upper right corner, click the **Prometheus Monitoring Entry** button **Get Monitoring Targets**, and select the appropriate network type and network configuration.

### 获取监控目标 ✕

网络类型

网络

如果现有的网络不合适, 您可以[新建私有网络](#) 或 [新建子网](#)

5. Click **Submit** to get the set of monitoring targets.



6. Modify the prometheus.yml configuration file by adding the node\_exporter scrape task.

```
job_name: prometheus-tdmq-pulsar
honor_timestamps: true
scrape_interval: 60s
metrics_path: /tencent-cloud-metrics/
scheme: http
static_configs:
- targets:
  - 10.x.x.x:10001
  - 10.x.x.x:10002
```

- `honor_timestamps` , when set to **true**, Prometheus will use the timestamps provided by the Exporter instead of the timestamps when the Prometheus server receives the metrics.
- `scrape_interval` , the frequency for capturing monitoring metrics data, the current monitoring metric is **minute-level**.
- `metrics_path` , the path to capture monitoring metrics, please set it to **/tencent-cloud-metrics/**.
- `scheme` , configure the protocol for accessing resources, currently only **http** is supported.

7. Access the corresponding visual interface to view configured monitoring metrics.

**Note:**

1. This feature provides monitoring data at the cluster level, Topic level, and subscription level for professional clusters, fully aligned with the metrics in the console. However, unlike the console, the monitoring data in the console is

aggregated, while the data through Prometheus is unaggregated, requiring you to aggregate and show it on the Grafana panel.

2. Due to different paths and aggregation logic of monitoring data collection, the data captured through this feature may differ in specific numerical values from the data shown in the user console.
3. This feature is only supported by professional clusters.

## Metric Description

### Cluster Level

Metrics	Metric Name
Cluster message production rate	pulsar_caculate_rate_in
Cluster message consumption rate	pulsar_caculate_rate_out
Cluster message storage size	pulsar_storage_size
Peak production bandwidth of the cluster	pulsar_throughput_in
Peak consumption bandwidth of the cluster	pulsar_throughput_out

### Topic Level

Metrics	Metric Name
The message production rate	pulsar_caculate_rate_in
Message consumption rate	pulsar_caculate_rate_out
The message production traffic	pulsar_throughput_in
Message consumption traffic	pulsar_throughput_out
Number of Producers	pulsar_producers_count

Number of Consumers	pulsar_consumers_count
Message storage size	pulsar_storage_size
Number of heaped messages	pulsar_msg_backlog
Message backlog size	pulsar_storage_backlog_size
Number of times traffic throttling is applied to producers	pulsar_publish_rate_limit_times
Number of filtered messages	pulsar_tag_filter_rejected_msg_rate

## Subscription Level

Metrics	Metric Name
Number of heaped messages	pulsar_subscription_back_log
Message consumption rate	pulsar_subscription_msg_rate_out
Message consumption traffic	pulsar_subscription_msg_throughput_out
Number of unconfirmed messages	pulsar_subscription_unacked_messages
Number of Consumers	pulsar_subscription_consumers_count
Number of delayed messages	pulsar_subscription_delayed
Message deletion rate	pulsar_subscription_msg_rate_expired
Number of filtered messages	pulsar_subscription_tag_filter_rejected_msg_rate