

TDMQ for RabbitMQ

Best Practices

Product Documentation



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Overview

This document describes how to migrate metadata from open-source RabbitMQ to TDMQ for RabbitMQ.

Prerequisites

Before the metadata import, you need to first export the metadata file from open-source RabbitMQ. For metadata file export instructions, see [Export open-source RabbitMQ metadata](#).

Directions

Export open-source RabbitMQ metadata

Export metadata via the console

1. Open the browser and log in to the open-source RabbitMQ console.
2. On the **Overview** tab page, click **Export definitions**, and enter the filename for download. Select "All" or a specific vhost for the "Virtual host" field and click **Download broker definitions** on the right to export the

metadata file of all vhosts or the specified vhost.

Export metadata with the HTTP-based API of open-source RabbitMQ

1. Open the terminal.
2. Enter the command below to export the metadata file from open-source RabbitMQ.
 - Export the metadata of all vhosts:

```
wget http://<Open-source RabbitMQ IP address>:15672/api/definitions --user <Open-source RabbitMQ username> --password <Open-source RabbitMQ password> -O <Metadata file storage path>
```

- Export the metadata file of a specified vhost:

```
wget http://<Open-source RabbitMQ IP address>:15672/api/definitions/<Vhost name> --user <Open-source RabbitMQ username> --password <Open-source RabbitMQ password> -O <Metadata file storage path>
```

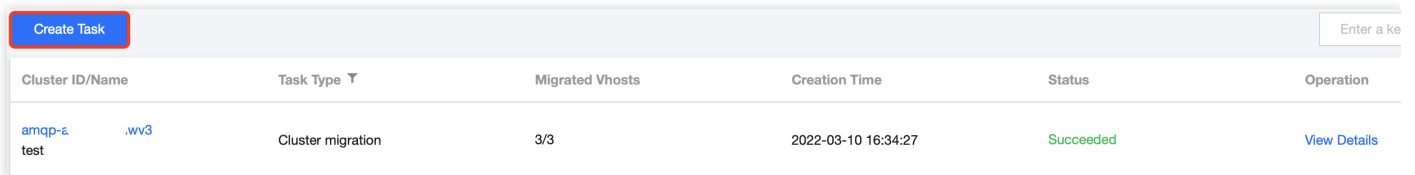
Note

Currently, TDMQ for RabbitMQ doesn't support the slash character "/", but you don't need to modify the metadata in case of such characters because TDMQ for RabbitMQ will escape the names that contain "/" when you import the metadata. The escape rules are as follows:

- The default RabbitMQ vhost name that starts with "/" will be renamed "__default_vhost__".
- For other vhost names that start with "/", the slash character will be deleted and other characters will be retained.

Import the metadata to the TDMQ for RabbitMQ console

1. Log in to the [TDMQ for RabbitMQ console](#) and click **Migration to Cloud** on the left sidebar.
2. On the **Migration to Cloud** page, select a region and click **Create Task**.



Cluster ID/Name	Task Type	Migrated Vhosts	Creation Time	Status	Operation
amqp-ε.test	Cluster migration	3/3	2022-03-10 16:34:27	Succeeded	View Details

3. On the task creation page, create a task to import the open-source RabbitMQ metadata and fill in the required fields.
 - Cluster migration
 - Vhost import

←

Create Migration Task

Task Type Cluster migration Vhost import

Cluster * test(amqp-0-1-vnvw3) ▼

If there is no desired cluster, you can [create one](#).

Message TTL ⓘ 1 day ▼

Retention period of unconsumed messages. They will be automatically deleted if they are not acknowledged within this period. Range: 60 seconds-15 days

Metadata File * Select Local File

1

Create Task
Close

Field description:

Field	Description
Task Type	Select either "Cluster migration" or "Vhost import". If you select the former, the metadata of all the open-source RabbitMQ vhosts will be imported. If you select the latter, the metadata of a single vhost will be imported.
Cluster	Select a target cluster that is to be imported. You can select an existing cluster or create a new one.
Vhost Name	This field is required if the task type is "Vhost import".

Field	Description
Message TTL	This field specifies the ACK timeout of an unconsumed message. If the task type is “Cluster migration”, the metadata of all vhosts will be imported, and the message TTL will be applied to all the imported vhosts. To modify this field, you can select a cluster on the Cluster page, click the Vhost tab, and click Edit in the Operation column.
Metadata File	Select and upload a metadata file exported from open-source RabbitMQ. The file content can be modified in the editing box. For more information on the file format, see Metadata file format description .

4. Click **Create Task** to submit the migration-to-cloud task.

After that, the metadata file format will be automatically verified. Once the verification is passed, you will be redirected to the **Migration to Cloud** page to view the migration progress.

Note

Only one migration task can be executed in a TDMQ for RabbitMQ cluster at a time, that is, a new task can be created only after the last task is finished.

View migration task details

1. Select a region on the [Migration to Cloud]<https://console.cloud.tencent.com/tdmq/rabbit-migrate> page, and you can view the list of all migration tasks in this region.

Cluster ID/Name	Task Type	Migrated Vhosts	Creation Time	Status	Operation
amqp-a5...wnwv3 test	Cluster migration	3/3	2022-03-10 16:34:27	Succeeded	View Details
amqp-a5...wnwv3 test	Cluster migration	1/1	2022-03-10 16:33:07	Succeeded	View Details

2. The **Status** column displays the execution status of each migration task. Below are the status descriptions:

Status	Description
Migrating	The metadata file is being migrated.
Succeeded	The metadata files of all vhosts have been successfully migrated.
Failed	The metadata file of a single vhost failed to imported (for the “Vhost import” task type); or the metadata files of all vhosts failed to be imported (for the “Cluster migration” task type).

Status	Description
Some failed	The metadata files of some vhosts failed to be imported (for the "Cluster migration" task type).
Timed out	The metadata file import timed out.

3. Click **View Details** in the **Operation** column to view the metadata file import details.

Task Details

Cluster ID	amqp-a- v3												
Cluster Name	test												
Task Type	Cluster migration												
Creation Time	2022-03-10 16:34:27												
Metadata File	task ↓												
Import Details	<div style="background-color: #f9f9f9; padding: 10px; border: 1px solid #eee;"> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">vhost1</td> <td style="width: 10%; text-align: center;">✔</td> <td style="width: 55%;">Import VHost 【vhost1】</td> <td style="width: 20%;">Task Run Success</td> </tr> <tr> <td>vhost2</td> <td style="text-align: center;">✔</td> <td>Import VHost 【vhost2】</td> <td>Task Run Success</td> </tr> <tr> <td>vhost3</td> <td style="text-align: center;">✔</td> <td>Import VHost 【vhost3】</td> <td>Task Run Success</td> </tr> </table> </div>	vhost1	✔	Import VHost 【vhost1】	Task Run Success	vhost2	✔	Import VHost 【vhost2】	Task Run Success	vhost3	✔	Import VHost 【vhost3】	Task Run Success
vhost1	✔	Import VHost 【vhost1】	Task Run Success										
vhost2	✔	Import VHost 【vhost2】	Task Run Success										
vhost3	✔	Import VHost 【vhost3】	Task Run Success										

Metadata import description

Metadata file format description

Task type	Cluster migration	Vhost import
File format	json	json
Field requirement	The metadata file must contain the vhost list. Besides, the exchange, queue, and binding lists must contain the "vhost" field.	
Naming convention	The vhosts, exchanges, queues, and bindings must be named in compliance with the naming conventions in TDMQ for RabbitMQ. For details, see Use Limits	The exchanges, queues, and bindings must be named in compliance with the naming conventions in TDMQ for RabbitMQ. For details, see Use Limits
Export method of open-source RabbitMQ metadata file	On the Overview tab page in the RabbitMQ console, click Export definitions and select All for the Virtual host field to export the metadata of all vhosts. If you want to exclude some vhosts from the migration task, delete them in the vhost list before the cluster migration.	On the Overview tab page in the RabbitMQ console, click Export definitions and select a specific vhost for the Virtual host field to export its metadata.

Metadata compatibility description

The table below describes whether TDMQ for RabbitMQ is compatible with open-source RabbitMQ metadata:

Metadata field	Description	Compatible
rabbitmq_version	Cluster version of open-source RabbitMQ.	No
users	User information of open-source RabbitMQ.	No
vhosts	Vhost list in open-source RabbitMQ	Yes. However, the default open-source RabbitMQ vhost named "/" will be automatically renamed "__default_vhost__" according to the naming conventions in TDMQ for RabbitMQ.
permissions	An open-source RabbitMQ user's vhost management permissions.	No
parameters	Runtime parameters of open-source RabbitMQ.	No

Metadata field	Description	Compatible
global_parameters	Global parameters of open-source RabbitMQ.	No
policies	Optional parameters that open-source RabbitMQ sets for a vhost's queues or exchanges, such as TTL and queue length limit.	No. If you want to use these optional parameters, you can go to the TDMQ for RabbitMQ console to edit them, or delete them and create new ones in the editing box on the Create Migration Task page.
queues	Open-source RabbitMQ queues.	Yes
exchanges	Open-source RabbitMQ exchanges.	Yes
bindings	Open-source RabbitMQ bindings.	Yes