

Distributed Message Service for RocketMQ

FAQs

Issue 01
Date 2024-12-23



Copyright © Huawei Cloud Computing Technologies Co., Ltd. 2024. All rights reserved.

No part of this document may be reproduced or transmitted in any form or by any means without prior written consent of Huawei Cloud Computing Technologies Co., Ltd.

Trademarks and Permissions



HUAWEI and other Huawei trademarks are the property of Huawei Technologies Co., Ltd.

All other trademarks and trade names mentioned in this document are the property of their respective holders.

Notice

The purchased products, services and features are stipulated by the contract made between Huawei Cloud and the customer. All or part of the products, services and features described in this document may not be within the purchase scope or the usage scope. Unless otherwise specified in the contract, all statements, information, and recommendations in this document are provided "AS IS" without warranties, guarantees or representations of any kind, either express or implied.

The information in this document is subject to change without notice. Every effort has been made in the preparation of this document to ensure accuracy of the contents, but all statements, information, and recommendations in this document do not constitute a warranty of any kind, express or implied.

Contents

1 Instance FAQs	1
1.1 Which RocketMQ Versions Are RocketMQ Instances Compatible with?	1
1.2 How Is Instance Reliability Ensured?	1
1.3 Why Can't I Select Two AZs When Purchasing a RocketMQ 4.8.0 Instance?	1
1.4 Can I Change the SSL Configuration of a RocketMQ Instance?	1
1.5 Does the Disk Type Affect the RocketMQ Instance Performance?	2
2 Connection FAQs	3
2.1 Does RocketMQ Allow Self-built Brokers to Be Connected to NameServers on the Cloud?	3
2.2 How Do I Handle Instance Connection Failure "RemotingTooMuchRequestException: sendDefaultImpl call timeout"?	3
3 Topic FAQs	4
3.1 How Many Topics Are Supported?	4
3.2 Is Automatic Topic Creation Supported?	6
3.3 What Are Topic Naming Rules?	6
4 Consumer Group FAQs	7
4.1 How Many Consumer Groups Are Supported?	7
5 Message FAQs	10
5.1 What Is the Message Retention Period of RocketMQ? Can I Modify It?	10
5.2 What Is the Maximum Message Size Supported RocketMQ? Can I Modify It?	10
5.3 What Is the Replication Mode of RocketMQ? Can I Modify It?	10
5.4 Where Is Message Creation Time Set?	10
6 Monitoring & Alarms	11
6.1 Why Can't I View Topic Monitoring Data?	11

1 Instance FAQs

1.1 Which RocketMQ Versions Are RocketMQ Instances Compatible with?

RocketMQ instances are compatible with open-source RocketMQ 4.8.0 and 5.x. 4.9.5 and later clients are recommended.

1.2 How Is Instance Reliability Ensured?

RocketMQ instance reliability is ensured through:

- Data storage in one master and two slaves
- Cross-AZ deployment

1.3 Why Can't I Select Two AZs When Purchasing a RocketMQ 4.8.0 Instance?

To improve the reliability of a RocketMQ 4.8.0 instance, you are advised to select three AZs or more when creating the instance. An instance deployed across two AZs may become unavailable when one of the AZs is faulty.

1.4 Can I Change the SSL Configuration of a RocketMQ Instance?

The SSL configuration can be changed. For details, see [Changing SSL](#).

1.5 Does the Disk Type Affect the RocketMQ Instance Performance?

About Message Production

RocketMQ persists received messages on disks and the message production throughput varies with the disk type. Higher disk throughput is more friendly to performant message production. When the disk performance is used up, disk access latency increases, causing higher message production request latency or even failure.

About Message Consumption

RocketMQ serially flushes messages to disks. A new message is stored in memory first, from which consumers start to consume the latest message.

In other cases, RocketMQ reads history messages from the disk and saves them to memory, that is, cold reads. Many cold reads consume many I/O resources, approaching the disk performance threshold. Message pulling may be slower or fail, causing the consumption rate to decrease.

Avoid using DMS for RocketMQ simultaneously in cold read-sensitive scenarios. For example, resetting the consumer offset of a consumer group in batches or consuming messages from an earlier offset when services are provisioned in batches. In production environments, ultra-high I/O and higher disks are recommended to avoid service exceptions caused by I/O bottlenecks.

2 Connection FAQs

2.1 Does RocketMQ Allow Self-built Brokers to Be Connected to NameServers on the Cloud?

No. If a self-built broker is connected to the NameServer on the cloud, management plane functions are affected. As a result, topics cannot be queried.

2.2 How Do I Handle Instance Connection Failure "RemotingTooMuchRequestException: sendDefaultImpl call timeout"

Symptom

Connecting to a RocketMQ instance failed. The error message is "RemotingTooMuchRequestException: sendDefaultImpl call timeout".

Possible Cause

The security group does not allow the service port.

Solution

1. On the instance details page of the RocketMQ console, view the port next to **Allow Access To** in the **Network** area.
2. Click the security group name to view details.
3. Add an inbound rule to allow the port obtained in [1](#).

3 Topic FAQs

3.1 How Many Topics Are Supported?

As shown in [Table 3-1](#), [Table 3-2](#), and [Table 3-3](#), the number of topics supported varies depending on the instance flavor.

Table 3-1 Instance flavors (DMS for RocketMQ 4.8.0)

Flavor	Brokers	Storage Space (GB per Broker)	TPS per Broker	Max. Topics per Broker	Max. Consumer Groups per Broker
rocketmq.4u8g.cluster.small	1-10	300-30,000	15,000	2,000	2,000
rocketmq.4u8g.cluster	1-10	300-60,000	20,000	4,000	4,000
rocketmq.8u16g.cluster	1-10	300-90,000	25,000	8,000	8,000
rocketmq.12u24g.cluster	1-10	300-90,000	28,000	12,000	12,000
rocketmq.16u32g.cluster	1-10	300-90,000	30,000	16,000	16,000

Table 3-2 Instance flavors (DMS for RocketMQ 5.x basic edition single-node)

Flavor	Storage Space (GB)	TPS	Max. Topics	Max. Consumer Groups
rocketmq.b1.large.1	100-30,000	500	50	500

Table 3-3 Instance flavors (DMS for RocketMQ 5.x basic edition cluster)

Flavor	Storage Space (GB)	TPS	Max. Topics	Max. Consumer Groups
rocketmq.b2.large.4	200-60,000	2,000	100	1000
rocketmq.b2.large.8	200-60,000	4,000	100	1000
rocketmq.b2.large.12	200-60,000	6,000	100	1000

Table 3-4 Instance flavors (DMS for RocketMQ 5.x professional edition single-node)

Flavor Name	Storage Space (GB)	TPS	Max. Topics	Consumer Groups
rocketmq.p1.large.1	100-30,000	500	200	500

Table 3-5 Instance flavors (DMS for RocketMQ 5.x professional edition cluster)

Flavor Name	Storage Space (GB)	TPS	Flexible TPS	Topics	Consumer Groups
rocketmq.p2.large.8	200-60,000	4,000	2,000	400	1,500
rocketmq.p2.large.12	200-60,000	6,000	3,000	400	1,500
rocketmq.p2.large.20	200-60,000	10,000	5,000	800	1,500
rocketmq.p2.large.40	400-120,000	20,000	10,000	800	1,500
rocketmq.p2.large.100	400-120,000	50,000	25,000	1000	2,000
rocketmq.p2.large.150	400-120,000	75,000	37,500	1000	2,000
rocketmq.p2.large.200	800-240,000	100,000	50,000	1,500	4,000

Flavor Name	Storage Space (GB)	TPS	Flexible TPS	Topics	Consumer Groups
rocketmq.p2.large.300	800-240,000	150,000	50,000	1,500	4,000

3.2 Is Automatic Topic Creation Supported?

No. RocketMQ does not support automatic topic creation.

3.3 What Are Topic Naming Rules?

A topic name must be unique and meet the following requirements

- Contains 3 to 64 characters.
- Contains only letters, digits, percent signs (%), vertical bars (|), hyphens (-), and underscores (_).
- Cannot start with **rmq_sys_**.
- Cannot be the same as the following strings:
 - TBW102
 - SCHEDULE_TOPIC_XXXX
 - BenchmarkTest
 - RMQ_SYS_TRANS_HALF_TOPIC
 - RMQ_SYS_TRACE_TOPIC
 - RMQ_SYS_TRANS_OP_HALF_TOPIC
 - TRANS_CHECK_MAX_TIME_TOPIC
 - SELF_TEST_TOPIC
 - OFFSET_MOVED_EVENT
 - rmq_sys_offset_commit_event

4 Consumer Group FAQs

4.1 How Many Consumer Groups Are Supported?

As shown in [Table 4-1](#), [Table 4-2](#), [Table 4-3](#), [Table 4-4](#), and [Table 4-5](#), the number of consumer groups supported varies depending on the instance flavor.

Table 4-1 Instance flavors (DMS for RocketMQ 4.8.0)

Flavor	Brokers	Storage Space (GB per Broker)	TPS per Broker	Max. Topics per Broker	Max. Consumer Groups per Broker
rocketmq.4u8g.cluster.small	1-10	300-30,000	15,000	2,000	2,000
rocketmq.4u8g.cluster	1-10	300-60,000	20,000	4,000	4,000
rocketmq.8u16g.cluster	1-10	300-90,000	25,000	8,000	8,000
rocketmq.12u24g.cluster	1-10	300-90,000	28,000	12,000	12,000
rocketmq.16u32g.cluster	1-10	300-90,000	30,000	16,000	16,000

Table 4-2 Instance flavors (DMS for RocketMQ 5.x basic edition single-node)

Flavor	Storage Space (GB)	TPS	Max. Topics	Max. Consumer Groups
rocketmq.b1.large.1	100-30,000	500	50	500

Table 4-3 Instance flavors (DMS for RocketMQ 5.x basic edition cluster)

Flavor	Storage Space (GB)	TPS	Max. Topics	Max. Consumer Groups
rocketmq.b2.large.4	200-60,000	2,000	100	1000
rocketmq.b2.large.8	200-60,000	4,000	100	1000
rocketmq.b2.large.12	200-60,000	6,000	100	1000

Table 4-4 Instance flavors (DMS for RocketMQ 5.x professional edition single-node)

Flavor Name	Storage Space (GB)	TPS	Max. Topics	Consumer Groups
rocketmq.p1.large.1	100-30,000	500	200	500

Table 4-5 Instance flavors (DMS for RocketMQ 5.x professional edition cluster)

Flavor Name	Storage Space (GB)	TPS	Flexible TPS	Topics	Consumer Groups
rocketmq.p2.large.8	200-60,000	4,000	2,000	400	1,500
rocketmq.p2.large.12	200-60,000	6,000	3,000	400	1,500
rocketmq.p2.large.20	200-60,000	10,000	5,000	800	1,500
rocketmq.p2.large.40	400-120,000	20,000	10,000	800	1,500
rocketmq.p2.large.100	400-120,000	50,000	25,000	1000	2,000
rocketmq.p2.large.150	400-120,000	75,000	37,500	1000	2,000
rocketmq.p2.large.200	800-240,000	100,000	50,000	1,500	4,000

Flavor Name	Storage Space (GB)	TPS	Flexible TPS	Topics	Consumer Groups
rocketmq.p2.large.300	800-240,000	150,000	50,000	1,500	4,000

5 Message FAQs

5.1 What Is the Message Retention Period of RocketMQ? Can I Modify It?

The message retention period for RocketMQ instances is 48 hours by default and the upper limit is 720 hours. For details about how to change message retention period, see [Changing Message Aging Period](#).

5.2 What Is the Maximum Message Size Supported RocketMQ? Can I Modify It?

The maximum message size supported by RocketMQ is 4 MB. This limit cannot be modified.

5.3 What Is the Replication Mode of RocketMQ? Can I Modify It?

A RocketMQ message is stored on three replicas, one master and two slaves. This mode cannot be modified.

5.4 Where Is Message Creation Time Set?

The message creation time is set by the producer during message production.

6 Monitoring & Alarms

6.1 Why Can't I View Topic Monitoring Data?

A percent (%) or vertical bar (|) contained in a topic name will be converted to an underscore (_) by Cloud Eye. For example, if a topic name is **test%01**, it will be displayed as **test_01** on Cloud Eye.