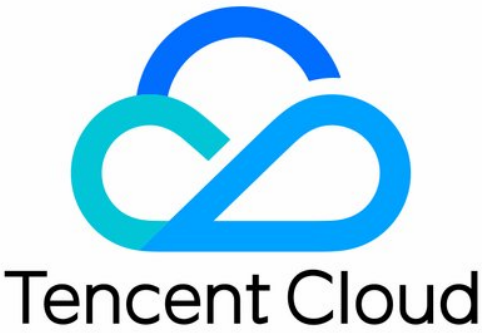
TDMQ for RocketMQ

Product Introduction

Product Documentation



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Product Introduction

Overview

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TDMQ for RocketMQ is a distributed high-availability message queue service. Built upon the infrastructure of Apache RocketMQ 4.x and 5.x, it offers various product forms that allow clients of version 4.4.x or later to connect without modifications. It also possesses the underlying capabilities of computing-storage separation and flexible scalability. TDMQ for RocketMQ supports a throughput of up to millions of TPS, making it ideal for various large-scale, low-latency, and reliability-demanding online messaging scenarios.

Product Strengths

Open-Source and Compatible

Fully compatible with all components and concepts of Apache RocketMQ, it supports clients of version 4.4.x or later to connect without modifications. It also possesses the underlying advantages of computing-storage separation and flexible scalability.

Variety of Specification Series

It offers a variety of sale specifications, covers a range of customer business scales, and supports various flexible billing modes such as actual message volume and hourly and monthly subscription. Flexibility between different specifications allows for scalability, meeting the product implementation rules from small-scale test to wide-ranging application use.

Cloud Native Adaptability

The underlying architecture has undergone a cloud native transformation and upgrade, allowing the serverless product form to provide exceptional elasticity. It supports additional flexible computation capabilities beyond specifications, while charging for storage based on actual usage.

Rich Message Types

Various messages types are supported, such as general messages, sequential messages, delayed messages, and distributed transaction messages. In addition, it supports message retry and dead letter mechanisms, satisfying a wide range of business scenarios.

High Performance

On cluster supports a maximum of ten-thousand-level throughput of production and consumption throughput. Through the distributed framework and stateless services, horizontal scaling can be applied to increase the entire cluster's throughput.

User-friendly and Ops-free

It provides APIs and supports open source SDKs of all languages and versions. It also provides a complete set of operations services on the Tencent Cloud platform, with real-time monitoring and alarms, enabling users to promptly identify and resolve issues, thereby ensuring the service's availability.

Differences Between Version 4.x and 5.x

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TDMQ for RocketMQ 5.x launched by Tencent Cloud is a next-generation message queue product based on Apache RocketMQ 5.x. It draws on the architectural and technological innovations of the community and practical tutorials of Tencent Cloud's large-scale operations on the message queue products over the years. It is primarily tailored to online business message scenarios, boasting low latency, high availability, high reliability, and scalability. Compared with TDMQ for RocketMQ 4.x of Tencent Cloud and open-source cluster products developed by customers, TDMQ for RocketMQ 5.x has the following advantages:

Item	TDMQ for RocketMQ 5.x	TDMQ for RocketMQ 4.x	Self-built Open-Source RocketMQ 4.x Products of Customers
SDK Compatibility	Compatible with SDKs of Apache RocketMQ 4.x and 5.x.	Compatible with Apache RocketMQ 4.x SDK.	Compatible with Apache RocketMQ 4.x SDK.
Overall Architecture	An architecture that separates compute and storage. Compute resources and storage pools can be automatically or manually scaled swiftly in response to traffic demands.	An architecture that integrates compute with storage.	An architecture that integrates compute with storage for most products.
Storage Elasticity	Storage pools with no quota limit are provided and are charged based on usage.	Storage pools that are charged based on quotas are provided. The storage capacity is limited.	No resource pool.
Computing Elasticity	Automated elasticity. The elastic bandwidth feature is provided for the Pro and Platinum Editions.	Online horizontal or vertical scaling.	Scaling must be performed by O&M personnel manually.
Monitoring Metrics	Over 100 metrics that are not available in the RocketMQ open-source community are provided. More metrics at the topic and group levels are available.	Over 50 metrics that are not available in the RocketMQ open-source community are provided.	External monitoring metrics built by customers are used generally.

O&M Complexity	O&M is not required, and automatic scaling is supported.	O&M is not required, and manual scaling is supported.	O&M is conducted via command-line operations, which is complex and costly and requires a high level of professional knowledge.
Billing Mode	Billing is based on specifications, traffic bandwidth, and actual storage usage. The overall costs can be reduced by 30%.	Billing is based on the instance and disk specifications or the number of API calls.	Billing is based on the occupied resources.
Usage Costs	The product is out-of-the-box service and provides support from a professional O&M team.	The product is out-of-the-box service and provides support from a professional O&M team.	O&M is conducted by customers.
Enhanced Features	Out-of-the-box advanced features, including message tracing, grayscale capabilities, and diagnostic capabilities, are provided. The service is undergoing rapid iterations to provide more new features.	Out-of-the-box advanced features, including message tracing, grayscale capabilities, and diagnostic capabilities, are provided.	Customers need to develop advanced features by themselves, which requires a high level of professional knowledge. The code maintenance is challenging due to differences from community standards.
Disaster Recovery Capability	Out-of-the-box disaster recovery capabilities are provided. By default, cross-AZ disaster recovery is adopted. Other schemes, such as remote disaster recovery, multi-site active-active, and united deployment, are also provided for customers to consult about.	Out-of-the-box disaster recovery capabilities are provided. By default, cross-AZ disaster recovery is adopted. Other schemes, such as remote disaster recovery and multi-site active-active, are also provided for customers to consult about.	Customers need to implement disaster recovery capabilities by themselves, which requires a high level of professional knowledge about message queues.
SLA Guarantee	Enterprise-level SLA guarantee provided: service availability of 99.99% and	Enterprise-level SLA guarantee provided: service availability of 99.99% and	Customers need to guarantee the SLA by themselves, which requires a high level of

	storage reliability of 99.9999999%.	storage reliability of 99.9999999%.	professional knowledge about message queues.
Business Support	24/7 support from the expert team of TDMQ for RocketMQ is provided. Training services are provided for customers who purchase the Platinum Edition.	24/7 support from the expert team of TDMQ for RocketMQ is provided.	Customers provide support by themselves.