

TencentDB for MySQL MySQL Cluster Edition



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MySQL Cluster Edition Maintenance and Management Instances Switch Between Read-Write Nodes and Read-Only Nodes

Last updated: 2026-05-19 10:44:31

TencentDB for MySQL Cloud Disk Edition instances support switching between read-write nodes and read-only nodes, that is, primary-secondary switch. When an instance fails, read-only nodes are switched to read-write nodes to ensure system availability and data integrity. The above describes automatic switchover performed by the system in special circumstances such as failures. Additionally, you can perform manual switchover via the console. This document introduces read-write node switch for Cloud Disk Edition. For primary-secondary switch in two-node or three-node instances, see [Primary-Secondary Switch](#).

Background

In enterprise applications, databases are often critical business systems. Once a database fails or goes down, it will severely impact business operations. Therefore, to ensure system availability and data integrity, it is necessary to adopt high availability solutions, such as primary-secondary switch. This allows rapid switching of read-only nodes under the instance to read-write nodes when a read-write node fails, avoiding business interruption and data loss.

Prerequisites

- To create an instance of TencentDB for MySQL cloud disk edition, see [Purchase Method](#).
- The instance is running, and no other tasks are being executed.

Must-Knows

- During a read-write node switch, a momentary disconnection lasting seconds may occur. It is recommended to perform the switchover operation during off-peak business hours and ensure the application has a reconnection mechanism.
- After a read-write node switch, the instance connection address remains unchanged. The original read-write node becomes a read-only node, and applications automatically connect to the new read-write node (that is, the original read-only node).

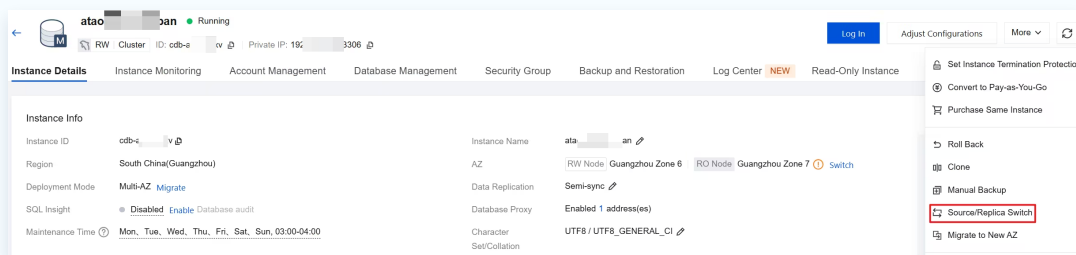
Operation Steps

1. Log in to the [TencentDB for MySQL console](#). In the instance list, click the **Instance ID** or **Manage** in the **Operation** column to go to the instance details page.
2. On the **Instance Details > Instance Info > AZ** page, click **Switch**.

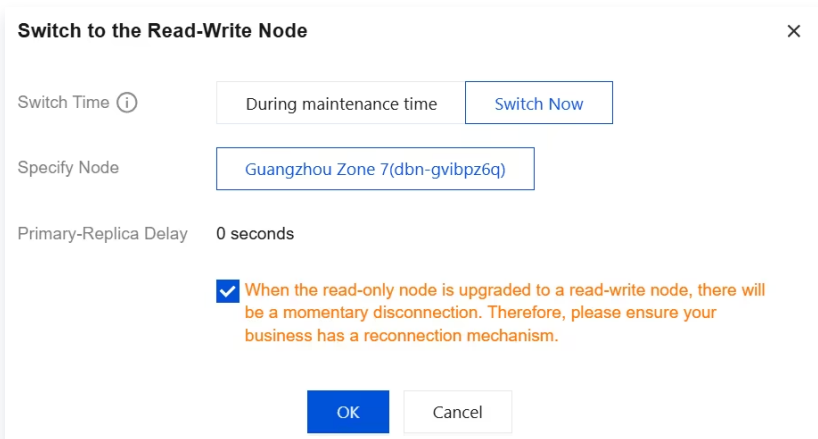


Note:

You can also directly click **More > Source/Replica Switch** in the upper-right corner of the **Instance Management** page.



3. In the pop-up window, select the switch time, specify the node, check the precautions, and then click **OK**.



- **During maintenance time:** Perform read-write node switch during the maintenance window. To modify the instance maintenance time, see [Setting Instance Maintenance Time](#).
 - **Switch Now:** The read-write node switch will be performed immediately after the configuration is completed.
4. When the instance status changes from "Primary/Secondary Switching" to "Running", the switch is completed.

Viewing Instance Monitoring

Last updated: 2026-05-19 10:48:03

TencentDB for MySQL provides monitoring for primary instances, read-only instances, disaster recovery instances, database proxy nodes, as well as the read-write nodes and read-only nodes of cloud disk edition instances. It offers an independent monitoring view for each instance for querying. This document describes how to switch between and view the monitoring of different nodes under a cloud disk edition instance via the console. For details about the monitoring feature, such as specific metrics and granularity, see [Monitoring Feature](#).

ⓘ Note:

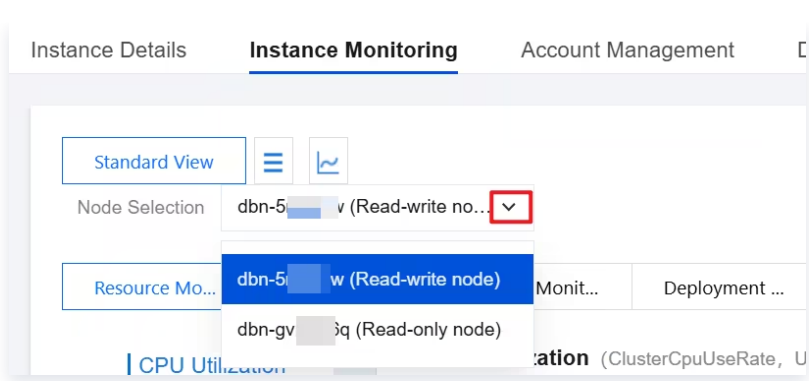
- You can use the Tencent Cloud Observability Platform (TCOP) API to [pull metric monitoring data](#) and [TencentDB for MySQL monitoring metrics](#) to obtain the instance's monitoring metrics.
- You can also [create a Dashboard](#) for monitoring metrics to dynamically analyze metric monitoring data.
- If one instance contains more than 300,000 tables, it can negatively impact database monitoring. Therefore, it is crucial to manage the number of tables effectively and ensure that the total number of tables in each instance stays below this threshold.

Prerequisites

- To create an instance of TencentDB for MySQL cloud disk edition, see [Purchase Method](#).
- The instance status is Running.

Operation Steps

1. Log in to the [TencentDB for MySQL console](#). In the instance list, click **Instance ID** or **Manage** in the **Operation** column to go to the instance details page.
2. Select the **Instance Monitoring** tab to view monitoring metrics for the read-write node (default).
3. To view monitoring data for other read-only nodes under the cloud disk-based instance, you can switch using the drop-down list after **Node Selection**.



Adjusting Instance Configuration

Last updated: 2026-05-12 19:24:17

TencentDB for MySQL supports quick adjustment of instance specifications, adding/removing nodes, and flexible scaling-out operations through the console. You can flexibly adjust the specifications of the MySQL instance based on actual business scenarios (such as initial business phase, rapid business growth phase, peak business period, off-peak business period, and so on), thereby better meeting requirements for optimal resource utilization and real-time cost optimization.

For adjusting fee changes, see [Adjusting Instance Fees Description](#).

For operations to adjust the configuration of single-node, two-node, and three-node instances, see [Adjusting Database Instance Specifications](#).

Prerequisites

- To create an instance of TencentDB for MySQL cloud disk edition, see [Purchase Method](#).
- The instance status is Running.

Operation Steps

1. Log in to the [TencentDB for MySQL console](#). In the instance list, click **Instance ID** or **Manage** in the **Operation** column to go to the instance details page.
2. After **Specification Configurations > Instance Specification**, click **Adjust Configurations**.

Specification Configurations			
Database Version	MySQL8.0 Upgrade 20241001 Upgrade	Architecture	Cluster edition
Engine	InnoDB	Instance Specification	Standard-CPU 2core, MEM 4000MB, Ma.. Adjust Configurations

3. On the redirected page, complete the following configuration and click **Submit**.

Instance Name: at-...>an

Private Network Address: 192.10.33.06

Expiration Time: 2026-04-30 11:29:57

Network: a[...e]

Architecture: Cluster edition(Cloud Disk)

Current Specs: Standard-4core8000MB MEM,50GB storage,, MySQL8.0

Instance Type: Standard Enhanced

Specification: Standard-4core8000MB

Hard Disk: Enhanced SSD - 50 + GB
Benchmark performance: 4300 IOPS, 145 MB/s bandwidth

Data Replication Mode: Semi-sync Async

Node Availability Zone

Node ID	Node Role	AZ	Operation
dbn-5 w	Read-write node	Guangzhou Zone 6	
dbn-g 6q	Read-only node	Guangzhou Zone 7	Delete

+ Add Read-Only Nodes

Submit Cancel *It may take longer to migrate data if there are tables without primary keys. [Check Tables without Primary Keys](#)*

Parameter	Description
Instance Type	Modifying the instance type (isolation policy) is supported. The instance types available for cloud disk edition instances are: standard and enhanced.
Specification	Select the instance specifications that need to be modified. For the specifically supported specifications of the cloud disk edition, see Database Instance Specifications .
Hard Disk	The cloud disk edition architecture uses cloud disks as the storage type. You can only increase the storage capacity, while scaling down the storage is currently not supported.
Data Replication Mode	Modifying the data replication mode of an instance is supported. The replication modes available for cloud disk edition instances are asynchronous replication and semi-synchronous replication. For modification methods, see Modifying the Data Replication Mode .
Node Availability	You can add or remove read-only nodes and change the node AZ in this section (subject to actual resource availability).

Availability Zone	
Switch Time	<ul style="list-style-type: none">• During the maintenance window: Perform configuration adjustments during the maintenance window. To modify the instance maintenance time, see Setting the Instance Maintenance Time.• When the upgrade is completed: Immediately perform the switch upon completion of the configuration adjustment.
Restart	Whether configuration adjustments will restart the instance, please refer to the actual configuration adjustment operations page. Some operations, such as modifying the replication mode or adding read-only nodes, do not involve a restart.

Migrate or upgrade to TencentDB for MySQL Cluster Edition

Last updated: 2026-03-20 09:44:23

This document introduces the methods for migrating or directly upgrading to TencentDB for MySQL Cluster Edition.

Background

As business data scales continue to grow and requirements for storage capacity and elasticity increase, enterprises are increasingly focusing on the elasticity, performance, flexibility, security, and reliability of database products. TencentDB for MySQL offers a cloud disk-based architecture suitable for complex business scenarios, such as: systems with frequent business changes, large database volumes, high read performance requirements, and needs for frequent specification adjustments or addition/deletion of read-only instances. In addition to purchasing TencentDB for MySQL Cluster Edition instances directly, you can migrate your MySQL databases to TencentDB for MySQL Cluster Edition through data migration. If you are using dual-node/three-node instances of TencentDB for MySQL, we recommend using the one-click upgrade feature to directly upgrade to TencentDB for MySQL Cluster Edition.

Scenarios

Scenario 1: Migration via DTS to TencentDB for MySQL Cluster Edition

Source	Target
<ul style="list-style-type: none">• IDC self-built MySQL / CVM self-built database / LighthouseDB MySQL• TencentDB for MySQL• MySQL from third-party cloud vendors	TencentDB for MySQL Cluster Edition

Scenario 2: One-click upgrade to TencentDB for MySQL Cluster Edition

Source	Target
TencentDB for MySQL	TencentDB for MySQL Cluster Edition

Operation Steps

For [Scenario 1](#), detailed preparations and operational steps see [Migration from MySQL to TencentDB for MySQL](#).

For [Scenario 2](#), you can directly perform a one-click upgrade via the console. The console feature page is as shown in the figure below. For detailed operational steps, see [One-Click Upgrade to Cluster Edition](#).

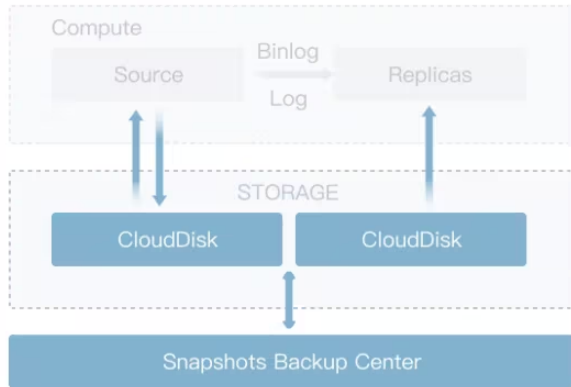
One-Click Upgrade



Upgrade to TencentDB for MySQL Cluster edition

TencentDB for MySQL Cluster edition adopts the cloud-native compute-storage separation architecture with one primary node and multiple replica nodes. It provides many features, such as automatic failover and switching of any replica node to the primary node.

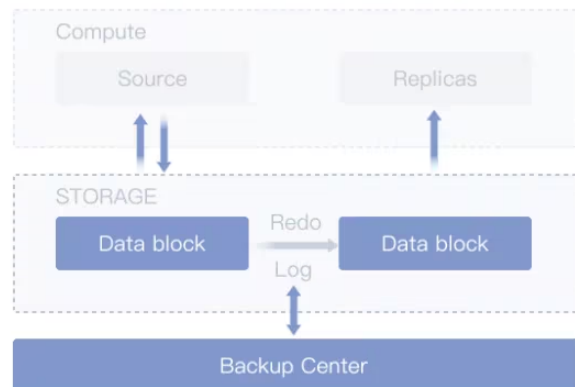
It is suitable for online games, e-commerce development, and other business scenarios.



Migrate to TDSQL-C for MySQL

TDSQL-C for MySQL is a new-generation cloud-native relational database developed by Tencent Cloud.

It is suitable for online games, e-commerce development, and other business scenarios.



Upgrade Now