TencentDB for DBbrain

Release Notes and Announcements

Product Documentation

Contents

Release Notes and Announcements

Release Notes

Last updated：2023-07-13 17:01:40

April 2023

Update	Description	Documentation
Added São Paulo region for TencentDB for MongoDB	DBbrain is supported for TencentDB for MongoDB in São Paulo region.	Region List

March 2023

Update	Description	Documentation
Added São Paulo region for TencentDB for Redis	DBbrain is supported for TencentDB for Redis in São Paulo region.	Region List
Optimized TencentDB for Redis big key analysis	DBbrain supports custom separators for TencentDB for Redis big key analysis.	Memory Analysis (Big Key Analysis)
Optimized SQL throttling for TDSQL-C for MySQL and TencentDB for MySQL	Keywords can be automatically separated when a SQL throttling task is created.	-f

February 2023

Update	Description	Documentation

| Optimized TencentDB for Redis big key analysis | 1. The separator dot (.) is supported for aggregate analysis by key prefix
2. The prefix key supports multi-field sorting.
3. You can implement big key analysis by memory usage, element quantity, and prefix from the instance or shard dimension. | Memory Analysis (Big Key Analysis) |

January 2023

Update	Description	Documentation
Optimized TencentDB for Redis big key analysis	1. The separator dot (.) is supported for aggregate analysis by key prefix 2. The prefix key supports multi-field sorting. 3. You can implement big key analysis by memory usage, element quantity, and prefix from the instance or shard dimension.	Memory Analysis (Big Key Analysis)

December 2022

Update	Description	Documentation
Supported event notification for TDSQL-C for MySQL	DBbrain can send you the TDSQL-C for MySQL diagnosis results generated in the exception diagnosis module.	Event Notification

November 2022

Update	Description	Documentation
Optimized the performance optimization feature for TencentDB for Redis	1. DBbrain supports the heartbeat logic and retry mechanism for TencentDB for Redis big key analysis tasks. 2. The prefix key analysis logic is optimized for TencentDB for Redis. 3. The initialization-stage instance diagnosis is optimized for TencentDB for Redis.	-

October 2022

Update	Description	Documentation
Optimized the diagnosis item ignoring feature	You can manage the diagnosis item ignoring operations and ignore the diagnosis results of the same type.	-
Optimized the session killing feature	You can manage killing operations by killing task type (including conditional kill, one-click kill, and autonomy center) for real-time MySQL sessions.	-

September 2022

Update	Description	Documentation
Added Seoul region for TDSQL-C for MySQL	DBbrain is supporteds for TDSQL-C for MySQL in Seoul region.	-
Added and optimized multiple metrics for TDSQL-C for MySQL	DBbrain adds and optimizes multiple statistics metrics for TDSQL-C for MySQL.	-
Supported SQL throttling and hotspot update protection for TDSQL-C for MySQL	DBbrain supports SQL throttling and hotspot update protection for TDSQL-C for MySQL.	Real-Time Session

August 2022

Update	Description	Documentation
Added Jakarta region for	DBbrain is supported for TencentDB for MySQL in Jakarta region.	-

TencentDB for MySQL	

June 2022

Update	Description	Documentation
Supported event notification	DBbrain can send you the TencentDB for MySQL diagnosis results generated in the exception diagnosis module.	Event Notification
Optimized multiple features	The table analysis feature is added in the optimization window for TencentDB for MySQL and TDSQL-C for SQL. The proxy node aggregate view is added for TencentDB for Redis. The latency distribution data is optimized to display value + percentage for TencentDB for Redis. The email notification capability is added to the session killing feature for TencentDB for Redis. You can search for a single instance in the exception distribution module. Key prefix analysis is supported for TencentDB for Redis memory analysis. SQL optimization suggestion is supported for `forceindex` and `binary concat` syntaxes. Health report subscription and sending are supported for self-built MySQL instances. Multiple prompt categories and user experience optimizations are released.	-

May 2022

Update	Description	Documentation
Added TencentDB for MongoDB index recommendation	Real-time log information can be collected and analyzed automatically. The optimal index will be recommended and ranked by its impact on performance, which can be operated online.	Index Recommendation
Supported TencentDB for MongoDB SQL throttling	You can control the database requests and SQL concurrency by restrictions on SQL type, maximum concurrency, throttling duration, and SQL keywords to ensure the fast business restoration when excessive CPU is consumed due to high traffic.	SQL Throttling

Enhanced TencentDB for MongoDB basic capabilities	SQL template samples and detailed template records are added for slow SQL analysis feature. Slow SQL details can be queried. Top collection trend and information are added; top database and collection search is supported for space analysis.	-

April 2022

Update	Description	Documentation
Optimized multiple features	Batch health report settings are supported for instance management. Exception-level filtering is supported in the exception push window for various database types covered by DBbrain. The slow SQL analysis page is optimized to add the **Export** button. The **Show Sleep Connection** button is added on the real-time session page. The one-click kill capability is added to the real-time session module. Multiple quick buttons are added to the SQL optimization module. Space analysis data (table/database/table without primary key) can be exported. The real-time session - SQL throttling feature is supported for MySQL 8.0. Audit analysis results are associated with deadlock diagnosis.	-
Added APIs	The following APIs are added: SQL throttling (TencentDB for MySQL): Query the SQL throttling task list of an instance; delete a SQL throttling task for an instance; create a SQL throttling task for an instance; change the SQL throttling task status of an instance. Big key analysis (TencentDB for Redis): Query the big key list of a TencentDB for Redis instance. SQL template conversion: Query SQL templates. Table without primary key: Query tables without primary key on an instance. Permissions: Verify the database account permissions of a user.	-

February 2022

Update	Description	Documentation
Supported visual	The topology of transactions with deadlocks and their lock	Deadlock

| deadlock analysis | relationships can be visually displayed. This feature can display the lock scope and details of locked data. It can also infer about executions based on execution plans, table structures, and SQL parsing to help you avoid deadlocks. | Visualization |

January 2022

Update	Description	Documentation
Supported TencentDB for MongoDB	Features supported for replica set and sharded instances include the overview, management, inspection, exception alarm, monitoring dashboard, real-time session, performance trends (distribution of request types with 10–100 ms latency), MongoStatus and MongoTop tools, collection space management, and 3D exception diagram (for replica set instances only).	Performance Trends
Released the API for killing sessions during a period	The API for killing sessions during a period is released for TencentDB for MySQL, TDSQL-C for MySQL, and TencentDB for Redis.	CreateProxySessionKillTask
Optimized the user experience	There are 27 experience optimizations, including the capabilities to customize dashboards for full instance monitoring, batch search for and add instances, switch single/multi-column in the monitoring view, drag the monitoring view in a larger area, adjust the size of the analysis result window on the right, and globally zoom in the view.	-

December 2021

Update	Description	Documentation
Upgraded ad hoc analysis of big key for TencentDB for Redis	The ad hoc analysis of big key feature for TencentDB for Redis (single-shard/multi-shard) supports custom analysis.	-
Supported exception push	Exceptions in a single TencentDB for MySQL database instance can be pushed.	-

| Supported slow SQL details | The slow SQL details feature is released for TencentDB for MySQL and TDSQL-C for MySQL (SQL details and analysis result details). | - |
| Supported uncommitted transaction audit | New capabilities are added, including exception diagnosis, uncommitted transaction SQL details, context, and single SQL statement performance analysis results. | - |

November 2021

Update	Description	Documentation
Supported alarming in Tencent Cloud Observability Platform (TCOP) (formerly known as Cloud Monitor)	You can configure TCOP smart alarm policies for TencentDB for MySQL in DBbrain.	-
Optimized metrics	The memory analysis metrics for TencentDB for Redis are more accurate.	-
Optimized visual analysis	The visual execution plan analysis capabilities are optimized to support the visual analysis of subqueries for TencentDB for MySQL and TDSQL-C for MySQL.	-
Added more exception diagnosis scenarios	More metric interactions are added to trigger exception diagnosis for TencentDB for MySQL and TDSQL-C for MySQL.	-
Optimized the exception analysis and verification algorithms	DBbrain's exception analysis and verification algorithms are optimized to increase the accuracy and log and analyze some exceptions such as immediate resolution after triggering and crash.	-

October 2021

Update	Description	Documentation
Released the visual execution	Execution plan visualization is supported for TencentDB for MySQL, TDSQL-C for MySQL, and self-built MySQL.	SQL Optimization

plan feature		
Supported InnoDB deadlock parsing	InnoDB deadlock parsing is improved to parse more types of data such as decimal and timestamp.	-

September 2021

Update	Description	Documentation
Released the health report configuration center	DBbrain allows you to customize health reports. You can generate and receive health reports regularly as needed. You can also customize the rules of health reports and kill reports and specify recipients and recipient groups for report sending.	Health Reports
Supported ad hoc analysis of big key for TencentDB for Redis	DBbrain supports ad hoc analysis of big key for TencentDB for Redis, so you can trigger big key analysis whenever you need it..	Memory Analysis (Big Key Analysis)

August 2021

Update	Description	Documentation
Supported batch killing sessions during a period	The capability of batch killing sessions during a period is added for TencentDB for MySQL and TDSQL-C for MySQL.	-
Optimized slow log analysis	Slow SQL analysis supports cross-day time selection.	-
Optimized the user experience	Slow query display and time display are optimized for TencentDB for Redis.	-

July 2021

Update	Description	Documention
Supported TencentDB for Redis	The following features are supported for TencentDB for Redis: Instance overview, instance management, database inspection, exception alarm, monitoring dashboard, performance monitoring	Slow Log Analysis

	(including performance trends and real-time performance monitoring), real-time session, memory analysis (including key analysis and big key analysis), access analysis (including hot key analysis, latency analysis, and command line analysis), slow log analysis, real-time log analysis, and health report.	
Optimized the user experience	You can redirect to a specific instance from the full instance monitoring section.	-

May 2021

Update	Description	Documentation
Added session killing records and details	DBbrain allows you to view the records and details of killed sessions. The "Kill Sessions During a Period" execution mode supports manual stop and scheduled stop.	Real-Time Session
Supported self-built database governance	DBbrain supports self-built database access through direct connection or deployment of the DBbrain agent on self-built databases. This enables multiple types of self-built databases (including CVM-based self-built databases, self-built databases in local IDCs, and self-built databases on VMs of other cloud vendors) to enjoy governance service capabilities provided by DBbrain, such as monitoring and alarming, performance optimization, and database management.	-

March 2021

Update	Description	Documentation
Supported scanning tables without primary key	You can detect tables without primary key on the current instance through regular scanning and manual refreshing.	Space Analysis

December 2020

Update	Description	Documentation
Supported	You can easily know the health status of the database instance	Health Report

sending health report via email	through the health reports email without logging in to the console. You can also customize the health reports and recipients to send as needed.	Email Push

October 2020

Update	Description	Documentation
Supported more regions	DBbrain can connect to TencentDB for MySQL instances in the following regions: Taipei (China), Mumbai, Singapore, Bangkok, Frankfurt, Moscow, Toronto, Seoul, and Tokyo.	Region List
Supported TDSQL-C for MySQL (which is compatible with MySQL and is formerly known as TencentDB for CynosDB)	The following DBbrain features are supported for TDSQL-C for MySQL (compatible with MySQL): instance overview, instance management, database inspection, exception alarms, monitoring dashboards, full instance monitoring, exception diagnosis, performance trends, and real-time sessions.	Feature List

July 2020

Update	Description	Documentation
Supported monitoring dashboard	The monitoring dashboard feature supports dashboard customization and allows you to link, compare, and view the monitoring data of multiple instances and metrics.	Intelligent Monitoring - Monitoring Dashboard
Supported viewing performance trends	The performance trends feature supports selection of multiple performance metrics and multiple ways to view performance trends, such as fine-grained view of one single performance metric trend, link comparison view of multiple performance metric trends, and time comparison view of multiple performance metric trends.	Performance Trends
Supported quick execution for database account authentication and common Ops commands	The SQL optimization feature helps you authorize database accounts, batch execute SQL statements, query history records, and identify transactions. It also provides common Ops commands for quick execution.	SQL Optimization

Added SQL throttling and hotspot update protection	You can use the SQL throttling feature to downgrade business at database level. The hotspot update protection feature (in beta testing) can improve database concurrency performance.	Real-Time Session
Supported physical file size measurement	The space analysis feature calculates the sizes of new physical files and provides trend curves of top tables and databases.	Space Analysis
Supported exception alarm notification push	The exception alarm notification push service and exception diagnosis history list are added in the TencentDB for MySQL console, making it easier for you to stay on top of database problems.	Exception Alarms

June 2020

Update	Description	Documentation
Supported connection to database instances in more regions	DBbrain supports connecting to database instances in Shenzhen, Nanjing, Chongqing, Chengdu, Hong Kong (China), Beijing Finance, Shanghai Finance, Shenzhen Finance, Silicon Valley, and Virginia regions.	-

May 2020

Update	Description	Documentation
Supported database inspection	The database inspection feature regularly automates health inspection of full instances. You can also set up custom inspections based on your own needs to help troubleshoot potential instance issues and provide solutions.	Database Inspection
Launched the SQL optimization effect prediction and comparison engine	The SQL optimization feature can display execution plan and overheads comparison before and after SQL optimization as well as performance improvement rate.	SQL Optimization
Added database account security scan	The database account security scan feature is launched to ensure account/password security.	-

Upgraded database health scoring system	The database health scoring system is upgraded to get more accurate running status of user's database by using AI.	-
Added new exception diagnosis items	New exception diagnosis items are added, including availability exception diagnosis (OOM, primary-secondary switch, failover, and delayed elimination) and root cause analysis.	Exception Diagnosis

March 2020

Update	Description	Documentation
Supported MySQL read-only and disaster recovery instances	DBbrain supports MySQL read-only instances and disaster recovery instances to provide source-replica delay monitoring (time/distance), source-replica delay diagnosis items, and advice.	-

February 2020

Update	Description	Documentation
Added statistics to slow SQL analysis	Statistics are available in slow SQL analysis, including time consumed distribution and source IP analysis.	Slow SQL Analysis
Supported instance list management	The instance management feature displays the information of the database instances currently supporting DBbrain. It mainly shows the basic information of database instances (instance name/ID, status, etc.) and their access sources, groups, exception alarms, health scores, and operations.	Instance Management
Supported exception alarm	The exception alarm feature displays the information overview of exception alarms (exceptions detected by "24/7 Exception Diagnosis") generated by database instances connected to DBbrain, including the basic information of the database instance (instance name/ID, private IP, AZ), risk level, diagnosis items, duration, and operations.	Exception Alarms

December 2019

Update	Description	Documentation
Supported full instance monitoring	The full instance monitoring page gives you an overview of the database monitoring metrics of all instances. Data of single monitoring metrics of all instances is displayed in a horizontal view. You can view and compare monitoring data of all instances on the same page, making it easier to detect database exceptions and view their details.	Intelligent Monitoring - Full Instance Monitoring

November 2019

Update	Description	Documentation
Supported health score and health report	The health score is used as a measure of the overall health of a database instance to show its health status. The health report feature can routinely perform health checks on the database instance and output the corresponding health reports for the specified time period.	Health Reports
Supported instance dashboard	The instance dashboard feature displays the summary of your instances. You can view information such as task execution, region distribution, real-time performance, and health assessment of all connected instances, which helps you stay up to date with all your database instances.	Instance Overview
Supported SQL optimization	The SQL optimization feature allows you to optimize SQL statements in just a few clicks and provides the corresponding execution plan interpretation and optimization advice.	SQL Optimization
Supported real-time session	The real-time session feature supports viewing real-time session information of the current instance, including performance and connection monitoring, running threads, and online killed sessions.	Real-Time Session

August 2019

Update	Description	Documentation
Supported exception diagnosis	Exception diagnosis provides real-time and historical views. The exception diagnosis feature provides you with real-time performance monitoring, health checks, and failure diagnosis and optimization, so that you can intuitively know the real-time operation status of database instances, locate newly appeared performance exceptions in real time, and optimize the system based on the optimization suggestions.	Exception Diagnosis

Supported slow SQL analysis	The slow SQL analysis feature calculates, samples, and aggregates records and execution information (source information, number of executions, execution duration, etc.) of slow SQL statements on the instance. Slow SQL analysis analyzes the performance of slow SQL statements based on the execution plan, comprehensive resource consumption, sizes of scan and result sets, and index usage rationality of the aggregated SQL statements and provides optimization suggestions.	Slow SQL Analysis
Supported disk space analysis	You can view the instance capacity utilization, including the sizes of data and log capacities, the daily increase in capacity utilization, the estimated number of available days, and the capacity used by tablespaces under the instance.	Space Analysis

Announcements

Postponed API Authentication Switch Date

Last updated：2022-09-01 18:34:46

According to the security requirements of Tencent Cloud, APIs that are directly accessed now require CAM authentication for access starting from April 28, 2022 (originally scheduled for April 8, 2022). You should grant access permissions for the following APIs in the CAM console before April 28, 2022 so that you can use them normally.

Note:

In the first announcement on March 31, 2022, the scheduled authentication switch date was April 8, 2022. In order to allow you sufficient time to get prepared, the deadline is hereby extended to April 28, 2022.

Notes

If you already use DBbrain's full read-write access policy (QcloudDBBRAINFullAccess), you don't need to perform this authorization.

If you have already authorized, the authentication switch will have no impact on your business; otherwise, you should authorize first before calling APIs.

APIs That Require CAM Authentication (Eight in Total)

API Name	API Description	API Type
DescribeSlowLogUserHostStats	Gets the slow log source address chart	Resource-level
DescribeUserSqlAdvice	Gets SQL statement optimization suggestions	Resource-level
DescribeMySqlProcessList	Gets the real-time thread list	Resource-level
DescribeTopSpaceSchemas	Gets the space statistics of top databases	Resource-level
DescribeDBDiagEvents	Gets the diagnosis event list	Operation-level
DescribeProxySessionKillTasks	Queries the status of the session killing task executed by the proxy node	Resource-level
DescribeDiagDBInstances	Gets the instance list	Operation-level

CreateProxySessionKillTask	Creates a task of killing proxy node sessions	Resource-level

Authorization Guide

1. Log in to the CAM console.

2. Click **Policies** on the left sidebar.

Resource-level APIs

Select **Create Custom Policy** > **Create by Policy Generator** to configure policy parameters.

Service: Select **TencentDB for DBbrain (dbbrain)**

Resource: Select **Specific resources** or **All resources**.

Operation-level APIs

Select **Create Custom Policy** > **Create by Policy Generator** to configure policy parameters.

Service: Select **TencentDB for DBbrain (dbbrain)**

Resource: Select **All resources**.

API Authentication Upgrade Notification [2022.03.31]

Last updated：2022-03-31 18:08:24

According to the security requirements of Tencent Cloud, APIs that are directly accessed now require CAM authentication for access from April 8, 2022. Please grant access permissions for following APIs in the CAM console before April 8, 2022 so that you can use them normally.

Note

If you use the QcloudDBBRAINFullAccess authentication policy, you don't need to modify it.

APIs that require CAM authentication (eight in total)

API Name	API Description	API Type
DescribeSlowLogUserHostStats	Gets the slow log source address chart	Resource-level
DescribeUserSqlAdvice	Gets SQL statement optimization suggestions	Resource-level
DescribeMySqlProcessList	Gets the real-time thread list	Resource-level
DescribeTopSpaceSchemas	Gets the space statistics of top databases	Resource-level
DescribeDBDiagEvents	Gets the diagnosis event list	Operation-level
DescribeProxySessionKillTasks	Queries the status of the session killing task executed by the proxy node	Resource-level
DescribeDiagDBInstances	Gets the instance list	Operation-level
CreateProxySessionKillTask	Creates a task of killing proxy node sessions	Resource-level