Data Admin Service

Getting Started

 Issue
 01

 Date
 2023-12-01





HUAWEI TECHNOLOGIES CO., LTD.

Copyright © Huawei 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 Technologies Co., Ltd.

Trademarks and Permissions

NUAWEI and other Huawei trademarks are trademarks 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 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.

Huawei Technologies Co., Ltd.

Address: Huawei Industrial Base Bantian, Longgang Shenzhen 518129 People's Republic of China

Website: <u>https://e.huawei.com</u>

Security Declaration

Product Lifecycle

Huawei's regulations on product lifecycle are subject to the *Product End of Life Policy*. For details about this policy, visit the following web page: https://support.huawei.com/ecolumnsweb/en/warranty-policy

Vulnerability

Huawei's regulations on product vulnerability management are subject to the *Vul. Response Process.* For details about this process, visit the following web page: https://www.huawei.com/en/psirt/vul-response-process For vulnerability information, enterprise customers can visit the following web page:

https://securitybulletin.huawei.com/enterprise/en/security-advisory

Initial Digital Certificate

The Initial digital certificates on Huawei devices are subject to the *Rights and Responsibilities of Initial Digital Certificates on Huawei Devices.* For details about this document, visit the following web page: https://support.huawei.com/enterprise/en/bulletins-service/ENEWS2000015789

Huawei Enterprise End User License Agreement

This agreement is the end user license agreement between you (an individual, company, or any other entity) and Huawei for the use of the Huawei Software. Your use of the Huawei Software will be deemed as your acceptance of the terms mentioned in this agreement. For details about this agreement, visit the following web page:

https://e.huawei.com/en/about/eula

Lifecycle of Product Documentation

Huawei after-sales user documentation is subject to the *Product Documentation Lifecycle Policy.* For details about this policy, visit the following web page: <u>https://support.huawei.com/enterprise/en/bulletins-website/ENEWS2000017761</u>

Contents

1 Logging In to a DB Instance	1
2 Developing or Maintaining Databases	3

Logging In to a DB Instance

This section describes how to log in to a DB instance.

Precautions

The following DB instances are supported:

Table 1-1	Supported	DB instances
-----------	-----------	--------------

DB Instance Source	Supported DB Engine				
Huawei Cloud DB	RDS for MySQL				
Instance	RDS for PostgreSQL				
	RDS for SQL Server				
	RDS for MariaDB				
	• DDS				
	• TaurusDB				
	• GaussDB				
	GeminiDB Cassandra API				
ECS-hosted DB Instance on Huawei Cloud	• The engine version of the managed MySQL instances can be 5.5, 5.6, 5.7, or 8.0. The instances are not deployed in HA clusters.				
	 Instances of PostgreSQL 9.4, 9.5, 9.6, 10, 11 and 12 are supported. 				
	 Instances of SQL Server 2008, 2012, 2014, 2016, or 2017 are supported, but HA cluster instances are not. 				

- The account used to create the current DB instance and the login account belong to the same account.
- The created DB instance and DAS must be in the same region.

Logging in to a DB Instance

This section describes how to log in to a Huawei Cloud DB instance. After a Huawei Cloud DB instance is created, DAS automatically creates login information for an administrator.

- Step 1 Log in to the DAS console.
- **Step 2** Click ⁽²⁾ in the upper left corner and select a region and project.
- Step 3 Click in the upper left corner, and under Databases, click Data Admin Service.
- **Step 4** In the navigation pane on the left, choose **Development Tool**.

You can also click **Go to Development Tool** on the overview page.

Step 5 Locate the target DB instance and click **Log In** in the **Operation** column.

You need to enter the password at the first login. If **Remember Password** is selected at the first login, you do not need to enter the password again at subsequent logins.

Figure 1-1 Database login information

Development Tool ③									💾 Help Center
My DB Instance Connections DB In	stance Connections Shared by Others 💿	DB Instance C	onnections that IAM U	sers Share with	n Others				
Add DB Instance Connection Ba									
DB Instance 🕀	DB Engine Version	Source Datab	Login Userna	Rememb	Description	Created \ominus	Additional Us	Operation	
Call provide an epidemic and a		RDS	root	Yes	- 2	Oct 11, 2024 15:28:23 GMT	View (0)	Log In Modify Delete	Intelligent O&M
 grand says to be applying and grand says to be applying a says 	and the state	RDS	root	Yes	- a	Sep 25, 2024 14:14:00 GMT	View (0)	Log In Modify Delete	Intelligent O&M
 A solution of the first of the solution of the so		RDS	root	Yes	- ll	Sep 19, 2024 14:55:59 GMT	View (1)	Log In Modify Delete	Intelligent O&M

D NOTE

- If a DB instance is not found, its **Log In** button will be grayed out.
- If the pop-up window is blocked when you click **Log In**, configure your browser to allow the **Huawei Cloud** website. After that, you can log in to the instance.
- The **DB Instance Logins that IAM Users Share with Others** tab page is displayed only when the Huawei ID account is used for login.

----End

More Login Scenarios

- Logging in to a DB Instance Shared by Others
- Logging in to an ECS-Hosted DB Instance

2 Developing or Maintaining Databases

DAS provides Development Tool and intelligent O&M to help you perform routine DB instance O&M and management.

Development Tool works an easy-to-use database client for developers. It provides diverse database development functions, including data and table structure synchronization, online editing, and intelligent prompts for SQL input.

Intelligent O&M is mainly designed for database administrators (DBAs) and provides the following database O&M functions: host and instance performance analysis, slow SQL and full SQL data analysis, real-time database performance analysis and diagnosis, and database history running data analysis, and more.

This section describes how to use DAS for RDS for MySQL instances.

Managing Databases

Step 1 Log in to the DAS console.

- **Step 2** Click ⁽²⁾ in the upper left corner and select a region and project.
- Step 3 Click in the upper left corner, and under Databases, click Data Admin Service.
- **Step 4** In the navigation pane on the left, choose **Development Tool**.

You can also click **Go to Development Tool** on the overview page.

- **Step 5** Choose **RDS** and **MySQL** from the drop-down lists in the upper right corner.
- **Step 6** Locate the MySQL DB instance you want to log in to and click **Log In** in the **Operation** column.

Figure 2-1 Logging in to a database

elopment Tool ③								C +
y DB Instance Connections DB Instance Conne	ections Shared by Others @) DB Instance Co	onnections that IAM U	Jsers Share with	Others			
Add DB Instance Connection Batch Dealer Connection for Critical Operations								
DB Engine: MySQL × Add filter								×)(Q)(
DB Instance 😔	DB Engine Version	Source Datab	Login Userna	Rememb	Description 😔	Created \ominus	Additional Us	Operation
0	MySQL 5.7.43	RDS	root	Yes	- C	Oct 11, 2024 15:28:23 GMT	View (0)	Log In Modify Delete Intelligent O&M
o in the second state of t	MySQL 5.7.44	RDS	root	Yes	- a	Sep 25, 2024 14:14:00 GMT	View (0)	Log In Modify Delete Intelligent O&M
A CONTRACT OF BUILDINGS		RDS		Yes	- a	Sep 19. 2024 14:55:59 GMT		Log In Modify Delete Intelligent O&M

Step 7 On the top menu bar, click **Database Management** and click **Change** to select a database you want to operate.

Figure	2-2	Database	management
--------	-----	----------	------------

Data Admin Service My Home Database			Databa	se Management	Import	and Export Structure Ma	inagement Data Scheme	Background Tasks	Account Mar	agement			
	Opport Metadata Celeration Data records displayed on this page are referented in real time (up to 10.000 records can be displayed), which consume your database performance somewhat. Collect Now 												
Tables	Tables + Citade Table Enter a table name.										1		
Views	0 St	atistics are read from informa	tion_sch	iema tables and are	not update	ed in real time. To obtain real-tin	ne data, you can update the tabl	a by executing the ANALYZE	TABLE statement	nt. This may affect table	performance, so you are not advised to pr	arform this operation.	
Stored Procedures Events		Table Name	¢	Created	¢	Rows(Estimated) ③ 0	Table Size(Estimated)	0 tindex Size(Estin	mated) 🗇 🗘	Character Set	Operation		
Triggers	+	$\frac{1}{2} \sum_{i=1}^{n-1} \frac{1}{2} \sum_{i=1}^{n-1$	1997 - S.	2024-07-12 19:3	15:22	0(Estimated)	0B(Estima	ted) (0B(Estimated)		Query SQL Statements Open	View Alter Renam	e More~
Functions	+	(1,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0		2024-07-12 19:3	15:22	0(Estimated)	0B(Estima	led) (B(Estimated)		Query SQL Statements Open	View Alter Renam	e More~
	+	Station and		2024-07-12 19:3	15:21	0(Estimated)	0B(Estima	led) (0B(Estimated)		Query SQL Statements Open	View Alter Renam	e More
	+	a sharebare was		2024-07-12 19:3	15:21	0(Estimated)	0B(Estima	led) ((Estimated)		Query SQL Statements Open	View Alter Renam	e More⊻
	+	Contractory of	5.0	2024-07-12 19:3	15:21	0(Estimated)	0B(Estima	ted) (0B(Estimated)		Query SQL Statements Open	View Alter Renam	e More⊻

Step 8 Click the **Objects** tab to view objects such as tables, views, stored procedures, events, triggers, and functions.

Figure 2-3 Objects

Sjords Metadola Collection												
© Data records displayed on this page are referenced in real time (up to 10,000 records) can be displayed), which consumes your database performances somewhat. Colorc! Now ×												
Tables	tater (1 Casheld											
Views	Statistics are read from information_schema.tables and are not updated in real time. To obtain real-time data, you can update the table by exceeding the AUALYZE TABLE statement. This may affect table performance, so you are not advised to perform this operation. X											
Stored Procedures		Table Name	Created 0	Rows(Estimated) ③ 🗘	Table Size(Estimated) ③ 🗘	Index Size(Estimated) ③ 🗘	Character Set	Operation				
Events	+	$\frac{1}{1000} \frac{1}{1000} \frac{1}{1000$	2024-07-12 19:35:22	0(Estimated)	0B(Estimated)	0B(Estimated)		Query SQL Statements Open View Alter Rename More >				
Functions	+	spin and tips.	2024-07-12 19:35:22	0(Estimated)	0B(Estimated)	0B(Estimated)		Query SQL Statements Open View Alter Rename More∨				
		10.0007-011				0B(Estimated)						

For more operations, see Managing MySQL Databases.

----End

Database O&M

Intelligent O&M is available for paid and free instances. Paid instances can enjoy more value-added functions. For details about how to set an instance as paid, see **Setting an Instance as Paid**.

The following describes how to use Intelligent O&M to view performance trend of an RDS for MySQL instance. For details, see **Intelligent O&M**

- Step 1 Log in to the DAS console.
- **Step 2** Click ⁽²⁾ in the upper left corner and select a region and project.
- **Step 3** Click in the upper left corner, and under **Databases**, click **Data Admin Service**.
- **Step 4** In the navigation pane, choose **Intelligent O&M** > **Instance List**.

Alternatively, on the **Overview** page, click **Go to Intelligent O&M**.

Step 5 In the upper right corner of the **Instance List** page, search for instances by engine type, instance name, or instance IP.

Figure 2-4 Searching for instances

elligent O&M				🗋 Learn more 🖉 De	evelopment Tool Enterpris	se Change Approval
Used/Total Quota: 7/45. Paid instances can store data ab	out performance history, slow query logs, and SQL Explorer 1	for a longer period of time than free instances.	Set as Paid			
Backend O&M Batch Set as Paid C	configure Concurrency Control Rules of SQL Statements	Increase Instance Quota	RDS DB Instan V MySQL	→ DB Inst	tance Na 🗸 🕴 📿 Enter a kej	yword.
Total Instances 5 Set Login Account	Instances Without Login Accounts 2 Set Login Account	Instances with Slow Query Log Disabled $\boldsymbol{0}$	Instances with SQL Exp Enable 3		Abnormal Instances 2	
Synchronize Instances Set Displayed Metrics	Sorting Card View Refresh	Export	Last	synchronized: Aug 15, 2024 10:37:09) GMT+08:00. Synchronize instance	is in a timely man
Paid 1 mmlain 1 mmlain	Pad	National A constraint print (2) Martin and (2)	Paid	Paid	- (b- 10) A barang bara dar bar Kara Dar Karan	Free
Set as Free Details	Set as Free Details	Set as Free De	tails Set a	s Free Details	Set as Paid	Details

- **Step 6** Locate the box containing your target instance and click **Details**.
- **Step 7** On the **Performance** tab page, perform the following operations:
 - Enable monitoring by seconds.

To improve the instantaneous accuracy of monitoring metrics, you can click **Enable Monitoring by Seconds**. In the displayed dialog box, toggle on **Monitoring by Seconds**, specify the interval, and click **OK**.

Figure 2-5 Enabling monitoring by seconds

Dashboard	Performance	Sessions	SQL	Locks and Transacti	ions Storage Analysis	binlog	Daily Reports
Enable Monitorin	ng by Seconds			Enable Monitorir	ng by Seconds		×
1h Period Raw	3h v data 🗸 All g	12h 10		Monitoring by Seconds	Interval 1 second You can set the time interval w DB instances to 1 minute or 5 m		reported from
Current	Active Connection	ns ⑦ Max 6	Min 2		OK Cancel		

• View the trends in metrics in the same time range on different days.

You can select **Select Date for Comparison**, and specify the target comparison date and metrics to view trends in the metrics at the same time on different days.

You can place the pointer over a time point in the trend chart to view the metric at the time point on different days.

Figure 2-6 Performance comparison

Enable Monitoring by Seconds			
1h 3h 12h 1d 7d	30d 🗮 Auto Refresh	Select Date for Compa	urison @ Jan 24, 2024 X Select Metric C
Period Raw data V All graphs are based on raw data. View	details		Enter a metric name. Q
CPU Usage ⑦ % Max Min 12 988 671 9	Memory Usage ① % Max Min 25 26 197 30 26 197 3	IOPS © Country Max Mm 3 2260 0.38 2	Network Input Throughput () () byte/s Max Max 16:0000 00:401/028 Network Input Throughput: 3664.010 lbyt of 2024/01/28 Network Input Throughput: 3694.010 lbyt
0 	0 		0 16:00 16:10 16:20 16:30 16:40 16:50

• View real-time performance of the instance.

You can deselect **Select Date for Comparison**, set a time range or select **1h**, **3h**, or **12h** to view real-time metrics of the instance.

You can place the pointer over a time point in the trend chart to view the metric at this time point.

Figure 2-7 Viewing performance metrics

1h	3h 12h	1d 7c	d 30d	Au	to Refresh			
Period	Raw data 🗸 All graph	ns are based on raw data. Vi	ew details					
	Usage 🕐	• +		ory Usage ?				
%		Max Min 9.88 6.71	%				Max 20.6	Min 19.7
12			25					
9	A		20					-
6	MMM	\mathbb{N}	15					
			10					
	24/01/25 16:38:00 GMT+08:0	00	5					
•	CPU Usage: 6.950 %		0					
	16:00 16:10 16:20 10	5:30 16:40 16:50		6:00 16:10	16:20 1	6:30 16:40	16:5)

• Customize the time range you wish to view.

After clicking , you can drag the mouse on the chart to select a period of time. Then, you can click **Analyze** to go to the **Slow SQL Logs** page and analyze slow query logs in the time period.

Figure 2-8 Locating and analysis

CPU Usage ?		Max Min	Memory Usa %	age
12 Selected Time Range: Jan 25, 2024 16:15:13—Jan		25		
, 25, 2024 16:42	2			
(23, 2024 10.4)	2:44		20	_
23, 2024 10.4.	2:44		20 15	
<u>(</u> 23, 2024 10.4.		Cancel		
(3		Cancel	15	
23, 2024 10.4.		Cancel	15 10	

