

Data Warehouse Service

Release Information

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1 What's New



The following tables describe the features released in each GaussDB(DWS) version and corresponding documentation updates. New features will be successively released in each region.

November 2024

No.	Feature/Update	Description	Phase	Documentation
1	9.1.0.210 cluster version is released.	9.1.0.210 cluster version is released.	Commercial use	<ul style="list-style-type: none">• New Features in 9.1.0.210• 9.1.0.x Developer Guide• 9.1.0.x SQL Syntax Reference

No.	Feature/Update	Description	Phase	Documentation
2	Modifications have been made to the cluster creation page for GaussDB(DWS).	<p>The following changes are implemented:</p> <ul style="list-style-type: none"> The standard data warehouse (DWS 2.0) and hybrid data warehouse are renamed as Computing In-Memory (CIM), indicating that data is stored on the local disks of DNs. The standard data warehouse (DWS 3.0) is renamed as Decoupled Storage And Compute, indicating that the local disks of DNs are only used for data warehouse cache and metadata storage, while user data is stored in OBS. 	Commercial use	<ul style="list-style-type: none"> Creating a GaussDB(DWS) 2.0 Cluster with Coupled Storage and Compute Creating a GaussDB(DWS) 3.0 Cluster with Decoupled Storage and Compute
3	Cluster parameter export is supported.	Click Parameters and click Export to export cluster configuration parameters.	Commercial use	Modifying GUC Parameters of the GaussDB(DWS) Cluster
4	Support for audit dumping of kernel logs is added.	Audit dumping of kernel logs is supported, which increases storage capacity and enhances the reliability of the Audit Dump feature.	Commercial use	Dumping GaussDB(DWS) Database Audit Logs
5	The SQL editor is optimized.	<p>The following functions are added to the SQL editor:</p> <ul style="list-style-type: none"> Full export: You can export all SQL query results to a specified path in an OBS bucket. By default, the results are exported to a CSV file. SQL task submission: You can submit selected SQL statements to the background for execution. Data source sharing: Custom data sources can be shared with other IAM users of the same tenant. 	Commercial use	SQL Editor Development Tool

No.	Feature/Update	Description	Phase	Documentation
6	The resource pool exception rule function is improved.	The default_memsize exception rule is added.	Commercial use	Exception Rules
7	The optimization diagnosis function is introduced.	GaussDB(DWS) offers a multi-dimensional optimization and diagnosis function to ensure fast and stable operation of user services. This allows you to query, diagnose, and analyze historical data, perform real-time queries and analysis, and conduct real-time session analysis.	Commercial use	Monitoring and Diagnosing Top SQL Statements in a GaussDB(DWS) Cluster

October 2024

No.	Feature/Update	Description	Phase	Documentation
1	The development and design specifications for GaussDB(DWS) are now live.	These specifications aim to effectively reduce resource consumption, alleviate service congestion, and enhance data development efficiency. Developers are advised to pay special attention to and comply with these specifications during SQL development.	Commercial use	GaussDB(DWS) Overall Development and Design Specifications

August 2024

No.	Feature/Update	Description	Phase	Related Documents
1	9.1.0.100 cluster version	<p>The newest cluster version, 9.1.0.100, is now available in two architectures: DWS 2.0, which combines storage and computing, and DWS 3.0, which separates storage and computing.</p> <p>When you create GaussDB(DWS) cluster on the console, selecting DWS 2.0 combines storage and computing, and stores data on local DNs. In contrast, choosing DWS 3.0 separates storage and computing, and local DNs are only used for data warehouse cache and metadata storage. User data is stored on OBS.</p>	Commercial use	<ul style="list-style-type: none"> 9.1.0.x Development Guide 9.1.0.x SQL Syntax
2	Configuring an auto scaling plan	<p>An auto scaling plan creates a logical cluster that facilitates parallel expansion of the storage-compute decoupled (DWS 3.0) architecture. Once such logical cluster is associated with the primary logical cluster, specific queries from the primary logical cluster are routed to the logical cluster, but table creation statements are still executed in the original logical cluster.</p>	Commercial use	Scheduling GaussDB(DWS) 3.0 Logical Cluster Creation and Deletion

July 2024

No.	Feature/Update	Description	Phase	Related Documents
1	8.3.0.108 cluster version	Solved some other database problems.	Commercial use	-

No.	Feature/Update	Description	Phase	Related Documents
2	Enhanced user management	<p>Enabled exporting database user and role lists, along with their respective permissions, directly from the console.</p> <ul style="list-style-type: none"> Added an export function to the user list, allowing you to export a comprehensive list of all users and roles. Added a permission export function that allows you to export all permissions associated with a specific user. 	Commercial use	Database User Management
3	Enabled database dynamic memory monitoring and alarm reporting.	<p>Added alarm reporting for node instance memory and dynamic memory usage. Tenants can customize alarm thresholds and subscribe to related alarms.</p>	Commercial use	Alarm Management
4	Optimized the cluster upgrade page	<p>Optimization points:</p> <ul style="list-style-type: none"> Changed Cold Storage to Cold Data on the page for creating a DWS 3.0 cluster. Changed Cold Data to Cold Partition Data on the DWS 3.0 cluster details page. OBS hot data is changed to cold data. Changed Cold Data to Cold Partition Data on the DWS 2.0 cluster details page. Changed the OBS hot data package to the cold data package on the page for purchasing discount packages. 	Commercial use	<ul style="list-style-type: none"> Creating a DWS 2.0 Cluster Creating a DWS 3.0 Cluster

May 2024

No.	Feature/Update	Description	Phase	Related Documents
1	SQL editor	The SQL editor enables connecting to cluster databases from the GaussDB(DWS) console. It provides a detailed view of the database metadata, enables the editing and execution of SQL queries, and presents the results through various chart formats. Additionally, it integrates with OBS for script management, allowing for global configuration and the ability to export SQL queries directly to OBS as text files.	Commercial use	SQL Editor Development Tool
2	Starting and stopping a cluster	If a cluster is no longer used, you can stop the cluster to bring services offline. You can start a stopped cluster to restore cluster services.	Commercial use	Starting and Stopping a Cluster
3	Inspection management	GaussDB(DWS) supports cluster inspection before change operations (scale-out/scale-in, changing all specifications, and upgrade). The change can be started after the inspection is passed. If the inspection fails, you can view the inspection details page to see which items did not pass the inspection. From there, you can handle the inspection items based on the details provided.	Commercial use	Viewing Inspection Results

No.	Feature/Update	Description	Phase	Related Documents
4	Intelligent distribution column recommendation	This is an important function in distributed database systems. It enhances data organization and accelerates query processing. Leveraging analysis of past query logs, the system can suggest the ideal distribution column for your data tables. This recommendation is designed to facilitate effective data partitioning and storage within the distributed database, thereby improving query efficiency.	Commercial use	Intelligent Distribution Column Recommendation
5	Exception rules	You can define exception rules. The system automatically terminates or downgrades jobs that meet the exception rules to maintain system stability. You can use SQL syntax to configure exception rules based on your resource and workload conditions, and associate the rules with resource pools.	Commercial use	Exception Rules
6	Changing a cluster name	After a GaussDB(DWS) cluster is created, you can change the cluster name to a name containing Chinese characters.	Commercial use	Changing the Cluster Name
7	Hot patch upgrade	The upgrade can be performed by adding a one-digit version number (in the format of 0001-9999) to the current cluster version.	Commercial use	Upgrading a Cluster
8	NFS backup media	The NFS backup media can be used as the backup device. Disks can be mounted to the NFS backup media, which depends on the cloud-based SFS-Turbo service.	Commercial use	Snapshot Overview

No.	Feature/Update	Description	Phase	Related Documents
9	Changing the security group of a cluster	<p>After a GaussDB(DWS) cluster is created, you can change the security group. You can also add, delete, or modify security group rules in the current security group.</p> <p>Changing the security group of a cluster may cause brief service disruption. Exercise caution when performing this operation. For better network performance, do not select more than five security groups.</p>	Commercial use	Changing the Security Group

March 2024

No.	Feature/Update	Description	Phase	Related Documents
1	Sharing the monitoring view of a data warehouse cluster among accounts	The function allows for seamless sharing of monitoring views across various accounts, avoiding duplicate configurations among different accounts and reducing the risk of configuration errors in read-only accounts.	Commercial use	Performance Monitoring
2	Using the cluster time zone for intelligent O&M scheduling	The intelligent O&M scheduling time supports the time zone of the cluster.	Commercial use	Viewing O&M Tasks
3	Specifying a time zone during cluster creation	When creating a cluster, you can specify the time zone based on the client time zone.	Commercial use	Creating a GaussDB(DWS) 2.0 Cluster
4	Enhanced host monitoring capability	You can view the performance metric topology of a single host in the last 1 hour, last 3 hours, last 12 hours, last 24 hours, last 7 days, or last 15 days.	Commercial use	Node Monitoring

No.	Feature/Update	Description	Phase	Related Documents
5	One-Click Clearing of All Idle Sessions	You can clear all idle sessions by one click.	Commercial use	Real-Time Queries
6	Changed the method of collecting statistics on the memory usage of cluster nodes.	The Memory Usage metric in the cluster monitoring function of Cloud Eye displays the memory occupied by cache. Post the March 2024 console upgrade, the display of this metric is improved.	Commercial use	Monitoring Clusters Using Cloud Eye

November 2023

No.	Feature/Update	Description	Phase	Related Documents
1	Cluster version 8.1.3.325 (recommended version)	Solved some other database problems.	Commercial use	-
2	GaussDB(DWS) 3.0 is released.	The newly released GaussDB(DWS) 3.0 version provides resource pooling, massive storage, and the MPP architecture with decoupled computing and storage. This enables high elasticity, real-time data import and sharing, and lake warehouse integration.	Commercial use	-

October 2023

No.	Feature/Update	Description	Phase	Related Documents
1	Cluster version 8.1.3.323 (recommended version)	Solved some other database problems.	Commercial use	-

No.	Feature/Update	Description	Phase	Related Documents
2	Enhanced log search	<p>Added the log search content and log filters:</p> <ul style="list-style-type: none"> Added logs related to cms, gtm, roach, upgrade, and scale-out of GaussDB(DWS). Logs can be searched by node. 	Commercial use	Cluster Log Management
3	Enhanced redistribution	<ul style="list-style-type: none"> Added the priority options of databases, schemas, and tables for redistribution. After the redistribution is complete, the average rate during the redistribution is displayed. The number of concurrent redistribution tasks can be dynamically adjusted during product redistribution. 	Commercial use	Viewing Redistribution Details

September 2023

No.	Feature/Update	Description	Phase	Related Documents
1	Cluster version 8.2.0.107 is released.	Solved some other database problems.	Commercial use	-
2	User permission management is supported.	You can create, delete, and update database users and manage their permissions on the console. This feature enables users to manage database users and user permissions on the console without logging in to databases.	Commercial use	Database User Management

No.	Feature/Update	Description	Phase	Related Documents
3	The database audit log dump function is optimized.	<ul style="list-style-type: none"> The compression type of audit logs is changed from zip to gzip. The audit log file can be in CSV format. For a cluster upgraded from an early version, a switch is available on the console to control compatibility. 	Commercial use	Dumping the Database Audit Logs
4	Multi-AZ clusters are supported.	In a multi-AZ cluster, three AZs can be selected at the same time, and server nodes are evenly allocated to the three AZs.	Commercial use	Creating a GaussDB(DWS) 2.0 Cluster

August 2023

No.	Feature	Description	Phase	Documentation
1	8.1.3.322 cluster version (recommended version) is released.	<ul style="list-style-type: none"> By default, the LIMIT statement is allowed to use early stop optimization. The default value of the GUC parameter enable_limit_stop is changed from off to on. Added the GUC parameter skip_btree_unsafe_restart_point. 	Commercial use	enable_limit_stop

July 2023

No.	Feature	Description	Phase	Documentation
1	O&M Account on the Cluster Details page	You can perform account authorization on the Cluster Details page to control the operation rights and impact scope of O&M personnel's access to clusters.	Commercial use	O&M Account

No.	Feature	Description	Phase	Documentation
2	Creating MRS data source connection as common users	Common user can directly use MRS data sources without requiring the system to create GaussDB(DWS) users by default.	Commercial use	Creating an MRS Data Source Connection

May 2023

No.	Feature	Description	Phase	Documentation
1	8.1.3.320 cluster version (recommended version) is released.	<ul style="list-style-type: none"> Added support for concurrent TRUNCATE, EXCHANGE, and SELECT operations. Added control over whether to enable early stop for LIMIT statements. 	Commercial use	-

April 2023

No.	Feature	Description	Phase	Documentation
1	Cluster upgrade on the console	Users can perform cluster upgrade operations on the console.	Commercial use	Cluster Upgrade
2	The database monitoring panel (DMS) supports the comparison of metrics on multiple nodes.	The node monitoring view on the performance monitoring panel displays the metrics of multiple nodes, which help identify the performance curve of abnormal nodes.	Commercial use	Performance Monitoring
3	Adding a CN to a specified node	CNs can be added to a specified node.	Commercial use	CNs

March 2023

No.	Feature	Description	Phase	Documentation
1	8.1.3.310 cluster version (recommended version) roll-out	<ul style="list-style-type: none"> The GUC parameter redact_compat_options is added to configure the compatibility of the data masking techniques. Some other database problems are solved. 	Commercial use	redact_compat_options

February 2023

No.	Feature	Description	Phase	Documentation
1	The resource management page is reconstructed.	The resource management page is reconstructed and Tiny3 is upgraded. This is to improve the page layout and operation usability.	Commercial use	Resource Management
2	The AS portal is integrated.	<p>The resizing function is renamed as "Changing all specifications", and the flavor change function is renamed as "Changing node flavor".</p> <p>The entries for changing all specifications, changing node flavors, and changing disk capacity are put under More > Change Specifications in the Operation column in the cluster list. The entries for scale-out, scale-in, and redistribution are put under the More > Scale Node column in the cluster list.</p>	Commercial use	Changing Specifications
3	Snapshot parameter configuration	You can specify parameters for creating a snapshot and restoring a snapshot to optimize the snapshot function.	Commercial use	Configuring a Snapshot

No.	Feature	Description	Phase	Documentation
4	Lock monitoring and alarm reporting on the monitoring panel (DMS)	In a specified period, the DMS alarm module detects that VACUUM FULL has been running for a long time in the cluster and blocks other operations. This alarm is generated if there are other SQL statements in the lock wait state and some restrictions are violated.	Commercial use	Alarm Management

December 2022

No.	Feature	Description	Phase	Documentation
1	8.1.3.300 cluster version rollout	The 8.1.3.300 kernel has been rolled out on a large scale and is used as the recommended version.	Commercial use	-
2	Cluster topology page	This page displays the topology of all nodes in a cluster, helping users view the status, processes, and IP addresses of each node.	Commercial use	Cluster Topology
3	Binding a cluster to an ELB in another VPC or enterprise project	Currently, ELBs can be bound in the same VPC or across VPCs.	Commercial use	Associating and Disassociating ELB
4	Optimized CN addition and deletion.	You can add or delete CNs online or add multiple CNs concurrently.	Commercial use	CNs

November 2022

No.	Feature	Description	Phase	Documentation
1	Snapshots can be restored to the current cluster.	If a cluster is faulty or data needs to be rolled back to a specified snapshot version, you can specify a snapshot to restore data to the current cluster.	Commercial use	Restoring a Snapshot to the Original Cluster
2	Snapshot creation can be manually stopped.	After a snapshot is created, you can manually stop the snapshot.	Commercial use	Stopping Snapshot Creation
3	Database monitoring can show server-level trends.	You can view the performance metric topology of a specific node in the last 1 hour, 3 hours, 12 hours, or 24 hours.	Commercial use	Node Monitoring
4	Node alias can be modified.	CNs can be associated with CN aliases on the node management page.	Commercial use	Managing Nodes
5	Added support for OBS data sources.	GaussDB(DWS) can access data on OBS by using an agency. You can create a GaussDB(DWS) agency, grant the corresponding permissions to the agency, and bind the agency to an OBS data source you created. In this way, you can access data on OBS by using OBS foreign tables.	Commercial use	Managing OBS Data Sources
6	The usability of resource management is improved.	<ol style="list-style-type: none">1. Workload Management is renamed Resource Management.2. Optimized resource exception rules. You can configure the data spilled to disk per DN and the average CPU usage per DN.	Commercial use	Resource Management

No.	Feature	Description	Phase	Documentation
7	The table diagnosis page is added to DMS.	You can monitor and analyze data table statistics in a cluster. You can view information about tables with skew rate higher than 5%, tables with dirty page rate higher than 50%, or top 50 tables in size.	Commercial use	Table Diagnosis
8	Optimized discount packages.	Discount packages can be shared in all projects under a single account.	Commercial use	Purchasing a Discount Package

October 2022

No.	Feature	Description	Phase	Documentation
1	8.1.3.200 cluster rollout	<p>The 8.1.3.200 kernel has been rolled out on a large scale and is used as the primary version.</p> <ul style="list-style-type: none"> The GUC parameter ddl_lock_timeout is added to specify the DDL lock timeout interval. Added the views PGXC_WAIT_DETAIL and PGXC_LOCKWAIT_DETAIL. Columns including wait_on_pid and query_id are added. Optimized some other issues. 	Commercial use	-

September 2022

No.	Feature	Description	Phase	Documentation
1	First roll-out in Europe	First roll-out in Europe	Commercial use	-