

TencentDB for PostgreSQL

Release Notes and Announcements

Product Documentation



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Release Notes and Announcements

Release Notes

Last updated : 2024-11-04 09:47:37

September 2024

Update	Description	Release Date	Documentation
Plugin support	TencentDB for PostgreSQL supports the standardized use of the pglogical plugin in Version 15.	2024-9-23	User Guide
The kernel supports SQL throttling.	Major Versions 14, 15, and 16 support SQL throttling capabilities, and throttling settings can be based on the query_id and SQL statements.	2024-9-23	User Guide
The kernel supports the separation of hot and cold data in StarRocks.	TencentDB for PostgreSQL Version PG13 supports the separation of hot and cold data through the StarRocks_fdw plugin.	2024-9-23	User Guide
Database management in the console	TencentDB for PostgreSQL supports the management of database objects in the console.	2024-9-23	User Guide

July 2024

Update	Description	Release Date	Documentation
Release of Account Management Feature	The console account management feature is released for TencentDB for PostgreSQL. You can perform operations such as account creation, deletion, password reset, and permission modification on the console.	2024-07-08	User Guide

June 2024

Update	Description	Release Date	Documentation
Release of Database Table Rollback	The database-level original instance rollback feature is released for TencentDB for PostgreSQL.	2024-06-06	User Guide

April 2024

Update	Description	Release Date	Documentation
Release of Database Isolation	The database-level resource isolation is released for TencentDB for PostgreSQL to meet your more refined resource isolation needs.	2024-04-22	User Guide
The disk limit corresponding to the instance is changed.	The disk space corresponding to instance specifications is reduced to 10GB, while the maximum disk specification available is increased.	2024-04-22	Details

March 2024

Update	Description	Release Date	Documentation
Adding New Kernel Versions	New kernel versions V10.23_r1.16, V11.22_r1.17 and V12.18_r1.19 are released for TencentDB for PostgreSQL.	2024-03-29	Kernel Version Updates

February 2024

Update	Description	Release Date	Documentation
Adding New Instance Specifications	TencentDB for PostgreSQL has released a variety of instance specifications, including 8-core 16 GB, 12-core 24 GB, 16-core 32 GB, 24-core 48 GB, and 32-core 64 GB for you to purchase.	2024-2-28	-

January 2024

Update	Description	Release Date	Documentation
Adding Monitoring Indicators across the Network	Newly added monitoring indicators across the network: Throughput, Read Throughput, Write Throughput, Connection Usage, Instance Port Input Traffic, and Instance Port Output Traffic.	2024-1-29	-

November 2023

Update	Description	Release Date	Documentation
Release of PostgreSQL 16.0 Version	The latest version of PostgreSQL 16.0 is provided for you.	2023-11-08	-
Updating the Default Aggregation Method for CPU Monitoring Metrics	In order to more accurately reflect the operational status of the current business system through monitoring data, the default aggregation method for the CPU usage monitoring indicator (monitoring indicator name: CPU) is updated to maximum value for TencentDB for PostgreSQL.	2023-11-20	-

October 2023

Update	Description	Release Date	Documentation
Database Audit Service Upgrade	Both a Quick Audit version and a Detailed Audit version are provided to suit different user scenarios.	2023-10-24	-

September 2023

Update	Description	Release Date	Documentation
Supporting Major Version Upgrade Capabilities	The major version upgrade capability has been launched for TencentDB for PostgreSQL, meeting your business needs for rapid and stable upgrades to the major database version.	2023-09-26	-

August 2023

Update	Description	Release Date	Documentation
Process Monitoring	Supported the process monitoring capabilities of TencentDB for PostgreSQL, enriching the fine-grained monitoring capabilities of the database and satisfying the ability to monitor tenants through database process resource monitoring in SaaS scenarios.	2023-08-17	-
New Specifications	Supported specifications of 24 cores 192-GB.	2023-08-17	-

July 2023

Update	Description	Release Date	Documentation
Rapid Physical Replication to the Cloud	Supported rapid physical replication to the cloud, which is faster and more stable than logical migration. It supports migration from self-built databases and third-party cloud vendors to TencentDB for PostgreSQL, while also accommodating swift migration between TencentDB for PostgreSQL in the cloud.	2023-07-31	User Guide
Release of Database Audit Services	Supported comprehensive auditing for TencentDB for PostgreSQL, assisting customers in managing audit risks, administrative risks, and technical risks associated with malicious activities.	2023-07-31	User Guide

Supported asynchronous replication mode, with granular settings available.	Supported master-slave asynchronous replication mode of TencentDB for PostgreSQL, providing customers with the ability to configure replication modes, latency degradation, and failover conditions. This ensures a more transparent and refined management of TencentDB for PostgreSQL for our customers.	2023-07-31	User Guide
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June 2023

Update	Description	Release Date	Documentation
Supporting Vector Retrieval Capabilities	In AI scenarios, the pgvector extension can be used to accomplish memory storage and training of LLMs.	2023-06-14	-

May 2023

Update	Description	Release Date	Documentation
Supporting Data Synchronization	Supported synchronizing self-built databases, cloud databases, and third-party cloud vendor databases to TencentDB for PostgreSQL.	2023-05-31	User Guide

April 2023

Update	Description	Release Date	Documentation
Supporting Backup Download Configuration	Backups can be downloaded via the Internet or Intranet through configuration.	2023-04-18	User Guide
Supporting Conversion	Supported self-service conversion from pay-as-you-go to monthly billing mode on the console.	2023-04-18	User Guide

from Pay-as-you-go to Monthly Packages			
Release of PG15	Provided all features of the community edition PG15.1 for customers.	2023-04-18	-

March 2023

Update	Description	Release Date	Documentation
Database Backup Service Upgrade	The database backup service upgrade supports console-based backup space viewing and manual backups.	2023-03-16	User Guide
Supporting Minor Version Upgrade Capabilities	Supported self-service minor version upgrades on the console.	2023-03-16	User Guide

February 2023

Update	Description	Release Date	Documentation
Supporting Logical Replication Slot Failover	The Failover Slot feature is released, which facilitates the synchronization of Slot information from the master database to the slave database, enabling users to seamlessly continue using logical subscriptions after High Availability (HA).	2023-02-15	User Guide

December 2022

Update	Description	Release Date	Documentation

Supporting Parameter Template Capabilities	Supported the templated editing of parameters and application instances, satisfying the diverse parameter adjustment needs of customers.	2022-12-09	User Guide
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November 2022

Update	Description	Release Date	Documentation
Optimization of Memory Monitoring Metrics	The calculation method for monitoring indicators (memory_rate: memory usage rate, memory: memory usage) has been optimized for TencentDB for PostgreSQL, making the current indicator more precise.	2022-11-17	-

October 2022

Update	Description	Release Date	Documentation
Supporting SQL Server Compatible Version	Adaptations have been made to Babelfish for PostgreSQL to support Microsoft SQL Server data types, syntax, and functions. In addition, the SQL Server wire-level protocol (TDS) is supported, facilitating communication between SQL Server applications and PostgreSQL.	2022-10-10	User Guide

July 2022

Update	Description	Release Date	Documentation
Supported DMC	TencentDB for PostgreSQL supports Database Management Center (DMC) which provides features such as database/table-level operations, real-time monitoring, and instance session management.	2022-07-25	-

April 2022

Update	Description	Release Date	Documentation
Supported setting the instance maintenance time	TencentDB for PostgreSQL allows you to set the maintenance time in the console to guarantee the stability of your database instances.	2022-04-26	Setting Instance Maintenance Time
Supported transparent data encryption (TDE)	TencentDB for PostgreSQL supports the TDE feature to ensure your data security.	2022-04-26	Enabling TDE
Added extensions	TencentDB for PostgreSQL supports pg_cron, TopN, and cos_fdw extensions.	2022-04-26	Supported Extensions
Supported PostgreSQL 14	TencentDB for PostgreSQL supports PostgreSQL 14 to provide more stable and faster enterprise-grade database services that are easier to deploy in more industries and help upgrade your business.	2022-04-26	Kernel Version Overview

January 2022

Update	Description	Release Date	Documentation
Supported cross-AZ disaster recovery	TencentDB for PostgreSQL supports cross-AZ instance deployment. This can avoid instance unavailability due to failures of a single AZ.	2022-01	Modifying AZs
Supported instance clone	TencentDB for PostgreSQL supports instance data restoration through instance clone.	2022-01	Cloning Instance
Supported the cross-AZ creation of read-only instances	Read-only TencentDB for PostgreSQL instances can be purchased across AZs for applications deployed in multiple AZs to provide nearby access.	2022-01	Overview
Supported cross-AZ subnet binding	TencentDB for PostgreSQL supports binding subnets in different AZs to enable nearby access. Subnet access	2022-01	Modifying Network

linkages will no longer be restricted by AZ.
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December 2021

Update	Description	Release Date	Documentation
Supported PostgreSQL 13	TencentDB for PostgreSQL supports PostgreSQL 13 to provide more stable and faster enterprise-grade database services that are easier to deploy in more industries and help upgrade your business.	2021-12	-
Supported multi-network settings for instances	TencentDB for PostgreSQL supports multiple sets of network configurations, so the same instance can be accessed through different VIPs, and the networks can be modified and switched. This supports multi-plane network features.	2021-12	Network Management
Added extensions	New extensions such as <code>pg_roaringbitmap</code> and <code>postgres_fdw</code> (for cross-database access) are added.	2021-12	Supported Plugins/Extensions
Supported kernel version management	TencentDB for PostgreSQL supports multiple kernel versions, with stronger stability and shorter access latency. You can query them and submit tickets to upgrade them.	2021-12	Kernel Version Management

October 2021

Update	Description	Release Date	Documentation
Instances can be downgraded	You can now downgrade the compute and disk specifications of an instance in the console.	2021-10	Modifying Instance Configuration
PostgreSQL 9.4,	You can now install a migration plug-in	2021-10	Migration from

9.5, and 9.6 support incremental migration	to incrementally migrate PostgreSQL 9.4, 9.5, and 9.6 databases to reduce business cut-over costs.		PostgreSQL to TencentDB for PostgreSQL
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September 2021

Update	Description	Release Date	Documentation
Parameter management is supported	You can now set and modify common instance parameters in the console.	2021-09	Setting Instance Parameters

August 2021

Update	Description	Release Date	Documentation
Disk capacity and instance specification have been optimized	The mapping between disk capacity and instance specification has been optimized. Instances of low specification can now support a larger disk capacity.	2021-08	Instance Types
Slow query analysis has been optimized	Slow query analysis has been upgraded. You can now view and compare the monitoring data of the slow query metric and another metric in the same chart, and view real-time slow query statements in the slow SQL list.	2021-08	Slow Query Analysis

July 2021

Update	Description	Release Date	Document
Scheduled configuration adjustment is supported	When upgrading an instance, you can specify the final switch time of the instance so as to avoid uncontrollable switch time after the instance configuration is adjusted.	2021-07	Modifying Instance Configuration

Legacy versions are deactivated	v9.3.5 and v9.5.4 are no longer available. Instances cannot be created on these two versions subsequently, but existing instances are still maintained normally.	2021-07	-
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May 2021

Update	Description	Release Date	Document
The user experience is optimized	The shipping and initialization processes are merged, so newly created instances don't need to be initialized by default. The complexity of the initial user password of databases is increased to meet various compliance requirements.	2021-05	-
Monitoring is upgraded	Alarm policies can be set for all metrics. 5-second monitoring is supported for all metrics. The accuracy of data collection by certain metrics is optimized.	2021-05	Monitoring Feature
Secondary authentication is supported now	Secondary authentication can be performed during password change.	2021-05	-

April 2021

Update	Description	Release Date	Document
Security enhancement	You can now use security groups to control instance access. Security groups control both public and private network access of instances in Beijing, Guangzhou, Shanghai, and Chengdu, but only the private network access of instances in other regions. The security group of an RO group can be different from those of the read-only instances in the RO group.	2021-04	Managing Security Groups

Instance management	You can purchase read-only instances in the monthly subscription billing mode for monthly subscribed primary instances. You can return monthly subscribed instances.	2021-04	Instance Management
Instance recycle bin	Terminated instances will be moved to the recycle bin; therefore, if any instances are terminated by mistake, they can be restored from the recycle bin. Instances in the recycle bin can be restored. Instances in the recycle bin can be eliminated.	2021-04	Instance Management

January 2021

Update	Description	Release Date	Document
PostgreSQL v12.4 is now available	TencentDB for PostgreSQL now supports PostgreSQL v12.4.	2021-01	Overview

December 2020

Update	Description	Release Date	Document
Read-only instances are now supported	TencentDB for PostgreSQL allows you to create one or more read-only instances, which are suitable for read/write separation and one-primary-multi-standby application scenarios and capable of greatly enhancing the read load capacity of your database.	2020-12	Creating Read-Only Instances

September 2020

Update	Description	Release Date	Document

PostgreSQL v11.8 is now available	Combined with optimized kernel and a complete set of management services, TencentDB for PostgreSQL v11.8 provides a more stable enterprise-level database service that is easier to deploy in more areas, helping you upgrade your business.	2020-09	Purchase Methods
Optimized monitoring metrics	TencentDB for PostgreSQL v11.8 optimized more than 10 monitoring metrics to better locate database issues. You can now view the history of databases status at a granularity of 5 seconds.	2020-09	Monitoring Feature
Upgraded plugins	TencentDB for PostgreSQL v11.8 supports more plugins/extension such as wal2json and pg_bigm now.	2020-09	Supported Plugins/Extensions

August 2020

Update	Description	Release Date	Document
Instance tags are now supported	You can now add and edit a tag for a TencentDB for PostgreSQL instance. You can also authenticate resources according to their tags.	2020-08	Overview
Serverless instances can be viewed in the console	You can view and manage serverless instances in the TencentDB for PostgreSQL console.	2020-08	Overview

July 2020

Update	Description	Release Date	Document
Access management is now supported	TencentDB for PostgreSQL now supports resource-level access management. You can set sub-users to	2020-07	Access Management

	control the permissions of instances on a detailed level.		
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April 2020

Update	Description	Release Date	Document
Pay-as-You-Go billing is now supported	You can now purchase pay-as-you-go TencentDB for PostgreSQL instances.	2020-04	Pricing

March 2020

Update	Description	Release Date	Document
Serverless instance support	PostgreSQL for Serverless (ServerlessDB) is a PostgreSQL-based database product that enables on-demand allocation of resources. It can automatically allocate resources according to the actual number of requests.	2020-03	Serverless

Open-Source Plugin Privilege Escalation Has Vulnerability Risk for PostgreSQL

Last updated : 2023-07-06 15:11:51

We have detected that Wiz, an external security organization, disclosed a privilege escalation vulnerability in an open-source PostgreSQL database extension. This vulnerability allows attackers with database login privileges and operable extensions to execute arbitrary functions for system command execution.

Impacts

Affected TencentDB for PostgreSQL extensions include but are not limited to the following:

- pg_cron
- adminpack
- amcheck
- file_fdw
- pageinspect
- pg_surgery
- pg_visibility
- pg_cron
- pg_bigm
- postgis
- postgis_raster
- postgis_sfcgal
- postgis_tiger_geocoder
- postgis_topology
- timescaledb
- zhparser
- tencentdb_stat
- plv8
- babelfishpg_common
- babelfishpg_money
- babelfishpg_tds
- babelfishpg_tsql
- tencentdb_superuser

tencentdb_stat
btree_gist
cube
citext
hstore
intagg
intarray
ltree
pg_trgm
seg

Suggestions

Currently, we haven't observed the abuse of this vulnerability in TencentDB for PostgreSQL. But considering extension risks, we are fixing the affected products. We will disable the creation and the upgrade of these extensions after 18:00 on April 20, 2023. The created extensions can still be used without affecting the normal use of other features for the instance. You can upgrade minor version in a self-service manner in the [TencentDB for PostgreSQL console](#) to restore the use of extensions after April 27, 2023. As the system will be restarted during the upgrade, ensure that your business has a reconnection mechanism. For more information, see [Upgrading Kernel Minor Version](#). If you need to use such extensions, [submit a ticket](#).

Announcements

Security Risk Statement for Creating Partial Plugins in PostgreSQL Cloud Database

Last updated : 2024-04-09 09:36:56

Dear user,

Creating extensions in instances with lower kernel versions may pose security risks. For better management and enhanced security of extensions, TencentDB for PostgreSQL has provided a new kernel version for your upgrade and use since August 17, 2023. To avoid risks and securely use these extensions, you need to [upgrade the kernel minor version](#).

Affected Scope

Kernel Minor Version Range	Affected Extensions
Later than v10.17_r1.12	xml2,postgis,postgis_raster,postgis_sfcgal,postgis_tiger_geocoder,postgis_topology,address_
Later than v11.12_r1.12	xml2,postgis,postgis_raster,postgis_sfcgal,postgis_tiger_geocoder,postgis_topology,address_
Later than v12.7_r1.13	xml2,postgis,postgis_raster,postgis_sfcgal,postgis_tiger_geocoder,postgis_topology,address_
Later than v13.3_r1.10	timesacledb,postgis,postgis_raster,postgis_sfcgal,postgis_tiger_geocoder,postgis_topology,ac
Later than v14.2_r1.12	postgis,postgis_raster,postgis_sfcgal,postgis_tiger_geocoder,postgis_topology,address_stanc
Later than v14.3_r1.13 (babelfish)	postgis,postgis_raster,postgis_sfcgal,postgis_tiger_geocoder,postgis_topology,address_stanc
Later than v15.1_r1.5	postgis,postgis_raster,postgis_sfcgal,postgis_tiger_geocoder,postgis_topology,address_stanc

Suggested Usage

From August 17, 2023, if you need to securely use the above extensions, please upgrade to a kernel minor version in the [TencentDB for PostgreSQL console](#). The upgrade will involve a system restart, so please prepare for service reconnection.

TencentDB for PostgreSQL Will Start Billing for Backup Space

Last updated : 2023-07-06 15:13:02

Starting from July 1, 2023, TencentDB for PostgreSQL will start billing for backup space in all regions.

Billing Time

Billed Period	Start Time	Free Tier
During the beta test of backup billing	July 1, 2023	700% of storage space
After the backup billing officially starts	August 1, 2023	100% of storage space

Backup Pricing

Backup space in excess of the free tier is priced at 0.000118 USD/GB/hour in the Chinese mainland and 0.000133 USD/GB/hour outside the Chinese mainland.

If the excessive backup space is less than 1 GB, no fees will be charged. If the time period is less than one hour, it will be calculated as one hour. TencentDB for PostgreSQL adopts a flexible giveaway policy, so you generally don't need to pay for the backup space for most instances.

Optimization Suggestions

If the actual backup space of the instance used by your Tencent Cloud account exceeds the free tier, additional backup fees will be incurred. You can go to the [TencentDB for PostgreSQL console](#) to check the backup, optimize and clean up the excess space in time, and control redundant backup storage to avoid excessive costs. For specific optimization methods and backup space definitions, see [Backup Space Billing](#).

Some Extensions on Lower Kernel Version Can't Be Created and Upgraded in TencentDB for PostgreSQL

Last updated : 2023-07-06 15:13:45

To standardize the management and improve the security protection of extensions, the creation and the upgrade of some extensions will no longer be supported for instances with earlier kernel versions after April 28, 2023, but the created extensions won't be affected. To create or upgrade these unsupported extensions, you need to upgrade the kernel minor versions. For more information, see [Upgrading Kernel Minor Version](#).

Impacts

Impact Scope of Kernel Minor Versions	Impacted Extensions/Plugins
On the following versions or later: v10.17_r1.11 v11.12_r1.9 v12.7_r1.10 v13.3_r1.8 v14.2_r1.9 v14.3_r1.10 Babelfish v15.1_r1.2	No limit
On other versions	pg_cron, adminpack, amcheck, file_fdw, pageinspect, pg_surgery, pg_visibility, pg_cron, pg_bigm, postgis, postgis_raster, postgis_sfcgal, postgis_tiger_geocoder, postgis_topology, timescaledb, zhparser, tencentdb_stat, plv8, babelfishpg_common, babelfishpg_money, babelfishpg_tds, babelfishpg_tsq, tencentdb_superuser , tencentdb_stat, btree_gist, cube, citext, hstore, intagg, intarray, ltree, pg_trgm, and seg.

Suggestions

To create and upgrade the above extensions/plugins, upgrade the kernel minor versions in the [TencentDB for PostgreSQL console](#).

Announcement on the Risk of Privilege Escalation Vulnerability in Cloud Database PostgreSQL Open Source Plugin

Last updated : 2024-04-09 09:34:54

Dear user,

Recently, Tencent Cloud detected that the external security organization Wiz disclosed a privilege escalation vulnerability in an open-source extension of a third-party PostgreSQL database. If an attacker has access to a database that allows users to manage extensions, the attacker can exploit the vulnerability to call functions to execute system commands.

[Affected Scope]

Affected TencentDB for PostgreSQL extensions include but are not limited to the following:

pg_cron
adminpack
amcheck
file_fdw
pageinspect
pg_surgery
pg_visibility
pg_cron
pg_bigm
postgis
postgis_raster
postgis_sfcgal
postgis_tiger_geocoder
postgis_topology
timescaledb
zhparser
tencentdb_stat
plv8
babelfishpg_common
babelfishpg_money
babelfishpg_tds

babelfishpg_tsql
tencentdb_superuser
tencentdb_stat
btree_gist
cube
citext
hstore
intagg
intarray
ltree
pg_trgm
seg

[How to Fix]

Tencent Cloud has the capability to monitor the exploitation of this attack and so far, no such behavior has been discovered. Considering the risks associated with the extensions, we are fixing the affected products. The extensions will be unable to be created and upgraded from 19:00 on April 20, 2023, except that those already created will be still available, and other features of the database instances remain unaffected. It is expected that after April 27, 2023, the extensions will resume after you perform a minor version upgrade in the [TencentDB for PostgreSQL console](#). The upgrade will involve a system restart, so please prepare for service reconnection. For details, please see [Upgrading kernel minor version](#). If you need to use such extensions, please click [Submit a Ticket](#) to contact us.