Release Notes for Aurora PostgreSQL

Amazon Aurora

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Amazon Aurora: Release Notes for Aurora PostgreSQL

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Release notes for Amazon Aurora PostgreSQL-Compatible Edition

The Amazon Aurora PostgreSQL-Compatible Edition release notes provide details about the Aurora PostgreSQL versions and extensions that are available for Amazon Aurora.

Aurora PostgreSQL releases are made available to all AWS Regions over the course of multiple days. Some Regions might temporarily show an engine version that isn't available in a different Region yet. We publish release notes when new versions are available in all Regions.

Topics

- Release calendars for Aurora PostgreSQL
- Amazon Aurora PostgreSQL updates
- Amazon Aurora PostgreSQL Limitless Database updates
- Babelfish for Aurora PostgreSQL updates
- Aurora PostgreSQL query plan management updates
- Extensions supported for Amazon Aurora PostgreSQL

Release calendars for Aurora PostgreSQL

The release calendars on this page can help you plan your major and minor version upgrades. For more information on Amazon Aurora upgrades, versioning, and lifecycle, see Amazon Aurora versions.

Topics

- Version currency timelines
- Release calendar for Aurora PostgreSQL major versions
- Release calendar for Aurora PostgreSQL minor versions
- Release calendar for Amazon Aurora PostgreSQL Limitless Database minor versions

Version currency timelines

Aurora PostgreSQL tracks community database engine releases on a defined cadence. These version currency timelines are published to give you transparency into that cadence. You can use these timelines to:

- Plan major version upgrades and estimate when a new Aurora PostgreSQL major version will be available.
- Schedule minor version upgrades during your maintenance windows.
- Select the right Aurora Long-Term Support (LTS) version for workloads that require staying on the same minor version across multiple release cycles.

The following table lists the version currency timelines for Aurora PostgreSQL.

Release type	Timelines
Major versions	Within 8 months of the community's first minor release for the new major version <major>.1
Minor versions	Within 3 months of the community release
Aurora LTS (per major)	Within 12 months of the Aurora major version release

Release calendar for Aurora PostgreSQL major versions

Aurora PostgreSQL major versions are available under standard support at least until community end of life for the corresponding community version. You can continue running a major version past its Aurora end of standard support date for a fee. For more information, see Using Amazon RDS Extended Support and Aurora pricing.

You can use the following dates to plan your testing and upgrade cycles.

> **Note**
>
> Dates with only a month and a year are approximate and are updated with an exact date when it's known.
> You can also view information about support dates for major engine versions by using the AWS CLI or the RDS API. For more information, see Viewing support dates for engine versions in Amazon RDS Extended Support.

Postgre L major version	Commu release date	Commu end of life date	Aurora major version	Aurora Postgre L LTS version	Aurora release date	Aurora end of standar support date	Start of RDS Extende Suppor year 1 pricing	Start of RDS Extende Suppor year 3 pricing	End of RDS Extende Suppor date	Minor versions eligible for RDS Extended Support
Postgre L 11	18 Octobe 2018	Novemb 2023	Aurora Postgre L 3. Applies to Postgre L 11.12 and older	Aurora Postgre L 11.9	26 Novemb 2019	29 Februar 2024	1 April 2024	1 April 2026	31 March 2027	Aurora PostgreSQ L 11.9 and 11.21

Postgre L major version	Commu release date	Commu end of life date	Aurora major version	Aurora Postgre L LTS version	Aurora release date	Aurora end of standar support date	Start of RDS Extend Suppor year 1 pricing	Start of RDS Extend Suppor year 3 pricing	End of RDS Extend Suppor date	Minor versions eligible for RDS Extended Support
			versions only. For version 11.13 and higher versions the Aurora version is the same as the *major.* version of the Postgre L commu version, with a third digit in the *patch* locatior							

Postgre L major version	Commu release date	Commu end of life date	Aurora major version	Aurora Postgre L LTS version	Aurora release date	Aurora end of standar support date	Start of RDS Extend Suppor year 1 pricing	Start of RDS Extend Suppor year 3 pricing	End of RDS Extend Suppor date	Minor versions eligible for RDS Extended Support
Postgre L 12	14 Novemb 2019	Novemb 2024	Aurora Postgre L 4. Applies to Postgre L 12.7 and older version only. For version 12.8 and higher version the Aurora version is the same as the *major.* version of the Postgre	Aurora Postgre L 12.9	23 Decemb 2020	28 Februar 2025	1 March 2025	1 March 2027	29 Februar 2028	Aurora PostgreSQ L 12.9 and 12.22

Postgre L major version	Commu release date	Commu end of life date	Aurora major version	Aurora Postgre L LTS version	Aurora release date	Aurora end of standar support date	Start of RDS Extend Suppor year 1 pricing	Start of RDS Extend Suppor year 3 pricing	End of RDS Extend Suppor date	Minor versions eligible for RDS Extended Support
			L commu version, with a third digit in the *patch* locatior							

Postgre L major version	Commu release date	Commu end of life date	Aurora major version	Aurora Postgre L LTS version	Aurora release date	Aurora end of standar support date	Start of RDS Extend Suppor year 1 pricing	Start of RDS Extend Suppor year 3 pricing	End of RDS Extend Suppor date	Minor versions eligible for RDS Extended Support
Postgre L 13	24 Septem 2020	Novemb 2025	Aurora Postgre L 13. For version 13.3 and higher versions the Aurora version is the same as the *major.* version of the Postgre L commu version, with a third digit in the *patch*	Aurora Postgre L 13.9	26 August 2021	28 Februar 2026	1 March 2026	1 March 2028	28 Februar 2029	Aurora PostgreSQ L 13.9 and 13.23

Postgre L major version	Commu release date	Commu end of life date	Aurora major version	Aurora Postgre L LTS version	Aurora release date	Aurora end of standar support date	Start of RDS Extend Suppor year 1 pricing	Start of RDS Extend Suppor year 3 pricing	End of RDS Extend Suppor date	Minor versions eligible for RDS Extended Support
			locatior when patches to Aurora are releasec							

Postgre L major version	Commu release date	Commu end of life date	Aurora major version	Aurora Postgre L LTS version	Aurora release date	Aurora end of standar support date	Start of RDS Extend Suppor year 1 pricing	Start of RDS Extend Suppor year 3 pricing	End of RDS Extend Suppor date	Minor versions eligible for RDS Extended Support
Postgre L 14	30 Septem 2021	Novemb 2026	Aurora Postgre L 14.3 and higher. The Aurora version is the same as the *major.r* version of the Postgre L commu version, with a third digit in the *patch* locatior when patches to	Aurora Postgre L 14.6	24 Februar 2022	28 Februar 2027	1 March 2027	1 March 2029	28 Februar 2030	To be determine d

Postgre L major version	Commu release date	Commu end of life date	Aurora major version	Aurora Postgre L LTS version	Aurora release date	Aurora end of standar support date	Start of RDS Extend Suppor year 1 pricing	Start of RDS Extend Suppor year 3 pricing	End of RDS Extend Suppor date	Minor versions eligible for RDS Extended Support
			Aurora are releasec							

Postgre L major version	Commu release date	Commu end of life date	Aurora major version	Aurora Postgre L LTS version	Aurora release date	Aurora end of standar support date	Start of RDS Extend Suppor year 1 pricing	Start of RDS Extend Suppor year 3 pricing	End of RDS Extend Suppor date	Minor versions eligible for RDS Extended Support
Postgre L 15	13 Octobe 2022	Novemb 2027	Aurora Postgre L 15.2 and higher. The Aurora version is the same as the *major.* version of the Postgre L commu version, with a third digit in the *patch* locatior when patches to	Aurora Postgre L 15.10	8 Februar 2023	29 Februar 2028	1 March 2028	1 March 2030	28 Februar 2031	To be determine d

Postgre L major version	Commu release date	Commu end of life date	Aurora major version	Aurora Postgre L LTS version	Aurora release date	Aurora end of standar support date	Start of RDS Extend Suppor year 1 pricing	Start of RDS Extend Suppor year 3 pricing	End of RDS Extend Suppor date	Minor versions eligible for RDS Extended Support
			Aurora are releasec							

Postgre L major version	Commu release date	Commu end of life date	Aurora major version	Aurora Postgre L LTS version	Aurora release date	Aurora end of standar support date	Start of RDS Extend Suppor year 1 pricing	Start of RDS Extend Suppor year 3 pricing	End of RDS Extend Suppor date	Minor versions eligible for RDS Extended Support
Postgre L 16	14 Septem 2023	9 Novemb 2028	Aurora Postgre L 16.1 and higher. The Aurora version is the same as the *major.r* version of the Postgre L commu version, with a third digit in the *patch* locatior when patches to	Aurora Postgre L16.8	31 January 2024	28 Februar 2029	1 March 2029	1 March 2031	28 Februar 2032	To be determine d

Postgre L major version	Commu release date	Commu end of life date	Aurora major version	Aurora Postgre L LTS version	Aurora release date	Aurora end of standar support date	Start of RDS Extend Suppor year 1 pricing	Start of RDS Extend Suppor year 3 pricing	End of RDS Extend Suppor date	Minor versions eligible for RDS Extended Support
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Postgre L major version	Commu release date	Commu end of life date	Aurora major version	Aurora Postgre L LTS version	Aurora release date	Aurora end of standar support date	Start of RDS Extend Suppor year 1 pricing	Start of RDS Extend Suppor year 3 pricing	End of RDS Extend Suppor date	Minor versions eligible for RDS Extended Support
Postgre L 17	26 Septem 2024	Novemb 2029	Aurora Postgre L 17.4 and higher. The Aurora version is the same as the *major.r* version of the Postgre L commu version, with a third digit in the *patch* locatior when patches to	Aurora Postgre L17.7	1 May 2025	28 Februar 2030	1 March 2030	1 March 2032	28 Februar 2033	To be determine d

Postgre L major version	Commu release date	Commu end of life date	Aurora major version	Aurora Postgre L LTS version	Aurora release date	Aurora end of standar support date	Start of RDS Extend Suppor year 1 pricing	Start of RDS Extend Suppor year 3 pricing	End of RDS Extend Suppor date	Minor versions eligible for RDS Extended Support
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Postgre L major version	Commu release date	Commu end of life date	Aurora major version	Aurora Postgre L LTS version	Aurora release date	Aurora end of standar support date	Start of RDS Extend Suppor year 1 pricing	Start of RDS Extend Suppor year 3 pricing	End of RDS Extend Suppor date	Minor versions eligible for RDS Extended Support
Postgre L 18	26 Februar 2026	Novemb 2030	Aurora Postgre L 18.3 and higher. The Aurora version is the same as the *major.r* version of the Postgre L commu version, with a third digit in the *patch* locatior when patches to	–	11 June 2026	28 Februar 2031	1 March 2031	1 March 2033	28 Februar 2034	To be determine d

Postgre L major version	Commu release date	Commu end of life date	Aurora major version	Aurora Postgre L LTS version	Aurora release date	Aurora end of standar support date	Start of RDS Extend Suppor year 1 pricing	Start of RDS Extend Suppor year 3 pricing	End of RDS Extend Suppor date	Minor versions eligible for RDS Extended Support
			Aurora are releasec							

> **Note**
>
> RDS Extended Support charges only apply after a major version reaches end of standard support. RDS Extended Support for PostgreSQL 11 starts on March 1, 2024, but will not be charged until April 1, 2024. Between March 1 and March 31, all PostgreSQL version 11 DB instances and clusters on RDS are covered under RDS Extended Support.

Release calendar for Aurora PostgreSQL minor versions

Aurora currently supports the following minor versions of PostgreSQL.

In general, Aurora minor versions are released quarterly. The release schedule might vary to pick up additional features or fixes.

Amazon RDS Extended Support charges apply only to certain minor versions after a major version is eligible for Extended Support. For more information, see Release calendar for Aurora PostgreSQL major versions.

> **Note**
>
> Dates with only a month and a year are approximate, and will be updated with an exact date when it's known.

PostgreSQL minor engine version	Community release date	Aurora release date	Aurora end of standard support date			
18						
18.4	May 2026	21 August 2026	31 December 2027			
18.3	26 February 2026	11 June 2026	30 November 2027			
17						
17.10	May 2026	21 August 2026	31 December 2027			
17.9	26 February 2026	6 April 2026	30 September 2027			
17.7 (LTS)	13 November 2025	18 December 2025	28 February 2030			
17.6	14 August 2025	25 November 2025	30 April 2027			
17.5	8 May 2025	30 June 2025	31 December 2026			

PostgreSQL minor engine version	Community release date	Aurora release date	Aurora end of standard support date			
17.4	20 February 2025	1 May 2025	30 November 2026			
16						
16.14	May 2026	21 August 2026	31 December 2027			
16.13	26 February 2026	6 April 2026	30 September 2027			
16.11	13 November 2025	18 December 2025	31 May 2027			
16.10	14 August 2025	25 November 2025	30 April 2027			
16.9	8 May 2025	30 June 2025	31 December 2026			
16.8 (LTS)	20 February 2025	8 April 2025	28 February 2029			
15						

PostgreSQL minor engine version	Community release date	Aurora release date	Aurora end of standard support date			
15.18	May 2026	21 August 2026	31 December 2027			
15.17	26 February 2026	6 April 2026	30 September 2027			
15.15	13 November 2025	18 December 2025	31 May 2027			
15.14	14 August 2025	25 November 2025	30 April 2027			
15.13	8 May 2025	30 June 2025	31 December 2026			
15.12	20 February 2025	8 April 2025	30 November 2026			
15.10 (LTS)	21 November 2024	13 December 2024	29 February 2028			
14						
14.23	May 2026	21 August 2026	28 February 2027			

PostgreSQL minor engine version	Community release date	Aurora release date	Aurora end of standard support date
14.22	26 February 2026	6 April 2026	28 February 2027
14.20	13 November 2025	18 December 2025	28 February 2027
14.19	14 August 2025	25 November 2025	28 February 2027
14.18	8 May 2025	30 June 2025	31 December 2026
14.17	20 February 2025	8 April 2025	30 November 2026
14.6 (LTS)	10 November 2022	23 January 2023	28 February 2027
13			
13.23*	13 November 2025	18 December 2025	28 February 2026
13.9 (LTS)*	10 November 2022	23 January 2023	28 February 2026

PostgreSQL minor engine version	Community release date	Aurora release date	Aurora end of standard support date			
12						
12.22*	21 November 2024	13 December 2024	28 February 2025			
12.9* (LTS)	11 November 2021	25 February 2022	28 February 2025			
11						
11.21*	10 August 2023	7 September 2023	29 February 2024			
11.9* (LTS)	13 August 2020	11 December 2020	29 February 2024			

* Amazon RDS Extended Support eligible minor engine version. For more information, see Using Amazon RDS Extended Support.

LTS - Aurora PostgreSQL long-term support (LTS) releases. For more information see Aurora PostgreSQL long-term support (LTS) releases.

Release calendar for Amazon Aurora PostgreSQL Limitless Database minor versions

Aurora currently supports the following Aurora PostgreSQL Limitless Database minor versions of PostgreSQL.

Note

Dates with only a month and a year are approximate, and will be updated with an exact date when it's known.

PostgreSQL Limitless minor engine version	Aurora release date	Aurora end of standard support date
16.11-limitless	February 25, 2026	October 2027
16.10-limitless	February 24, 2026	September 2027
16.9-limitless	September 5, 2025	March 2027
16.8-limitless	May 8, 2025	November 2026
16.6-limitless	January 24, 2025	September 2026
16.4-limitless	October 31, 2024	September 2026

Amazon Aurora PostgreSQL updates

Following, you can find information about versions of the Amazon Aurora PostgreSQL-Compatible Edition database engine that have been released for Amazon Aurora.

For more information about Aurora PostgreSQL support dates, including extended and long-term support, see Release calendars for Aurora PostgreSQL.

To determine the version number of your Aurora PostgreSQL database, see Identifying versions of Amazon Aurora PostgreSQL in the *Amazon Aurora User Guide*.

For information about extensions and modules, see Extensions supported for Amazon Aurora PostgreSQL.

For information about Amazon Aurora available releases, policies, and time lines, see How long Amazon Aurora major versions remain available in the *Amazon Aurora User Guide*. For more information about support and other policies for Amazon Aurora see Amazon RDS FAQs.

To determine which Aurora PostgreSQL DB engine versions are available in an AWS Region, use the describe-db-engine-versions AWS CLI command as shown following.

```
aws rds describe-db-engine-versions --engine aurora-postgresql --query '*[].
[EngineVersion]' --output text --region aws-region
```

For a list of AWS Regions, see Aurora PostgreSQL Region availability in the *Amazon Aurora User Guide*.

Topics

- PostgreSQL 18 versions
- PostgreSQL 17 versions
- PostgreSQL 16 versions (includes some deprecated versions)
- PostgreSQL 15 versions (includes some deprecated versions)
- PostgreSQL 14 versions (includes some deprecated versions)
- PostgreSQL 13 versions (includes some deprecated versions)
- PostgreSQL 12 versions (includes some deprecated versions)
- PostgreSQL 11 versions (includes some deprecated versions)

- PostgreSQL 10 versions (Deprecated)
- PostgreSQL 9.6 versions (Deprecated)

PostgreSQL 18 versions

Version updates

- PostgreSQL 18.4
- PostgreSQL 18.3

PostgreSQL 18.4

This release of Aurora PostgreSQL is compatible with PostgreSQL 18.4. For more information about the improvements in PostgreSQL 18.4, see PostgreSQL release 18.4.

Releases and patches

- Aurora PostgreSQL 18.4.1, August 21, 2026
- Aurora PostgreSQL 18.4, August 21, 2026

Aurora PostgreSQL 18.4.1, August 21, 2026

Critical stability enhancements

- Fixed an issue in the Aurora Storage Daemon that in rare cases could impact availability.

Aurora PostgreSQL 18.4, August 21, 2026

New features

- Improved performance of heap and B-tree index operations through pre-allocation of free pages for regular tables and B-tree indexes.

Critical stability enhancements

- Fixed an issue that in rare cases could lead to unavailability for Aurora Replica clusters after a restart.

High priority enhancements

- Back-ported fixes for the following PostgreSQL community security issues:
  - CVE-2026-6472
  - CVE-2026-6473
  - CVE-2026-6474
  - CVE-2026-6475
  - CVE-2026-6476
  - CVE-2026-6477
  - CVE-2026-6478
  - CVE-2026-6479
  - CVE-2026-6575
  - CVE-2026-6637
  - CVE-2026-6638
- Fixed an issue in reader upgrades that could cause a few additional seconds of downtime when waiting for reader node process synchronization.
- Fixed an issue that could cause upgrades to take a few seconds longer due to an unexpected termination of the logging process.
- Fixed an issue that in rare cases causes contention during extremely heavy write workloads, resulting in slower query progress and potential database unavailability.

General enhancements

- Improved Aurora storage metadata management memory usage when managing tens of millions of objects and files.
- Improved commit latency for Aurora Serverless instances when I/O optimized is enabled.
- Improved Aurora Replica availability and replay throughput by eliminating unnecessary buffer cache allocation and I/O during write-ahead-log replay for all operations.
- Fixed an issue in the Aurora storage daemon that in rare cases could cause brief periods of unavailability during a restart operation.
- Fixed an issue with suboptimal B-tree prefetch causing increased I/O wait times.
- Improved B-tree prefetch performance in scenarios where continued index scans were not properly utilizing prefetch buffers.

- Fixed an issue where an internal timeout during Zero-Downtime Patching could exceed its intended duration, causing unnecessary fallback to a standard restart with longer downtime.
- Added support for the `plv8.memory_limit` parameter, allowing customers to configure the memory limit for the plv8 extension. For more information, see plv8 documentation.
- Fixed an issue where GRANT SET ON PARAMETER on extension parameters could bypass intended parameter privilege restrictions. Grants on unregistered extension parameters are no longer permitted, and GRANT SET ON PARAMETER privileges on restricted parameters are no longer honored for non-superuser roles.
- Fixed a security issue in trusted PL/Perl that could allow privilege escalation.
- Fixed multiple security issues in trusted PL/Tcl that could allow code execution or cause brief periods of unavailability.
- Fixed a potential deadlock that could cause database shutdown to hang due to a lost wakeup race condition in the shutdown logic.
- Added a safety guard within a diagnostic logging function to prevent a crash.
- Fixed an issue that caused reader upgrades to experience slightly higher downtime due to delayed process synchronization.
- Improved the handling of uninitialized Visibility Map pages migrated from RDS PostgreSQL.
- Fixed a race condition in encryption key initialization that could cause a brief period of unavailability.
- The pg_repack extension is now compatible with tables that are part of a zero-ETL integration.
- Fixed an issue where Zero-Downtime Patching (ZDP) could fall back to regular patching on inbound replicas, resulting in slightly higher downtime during maintenance operations.
- Fixed an issue with the multitransaction system that could cause database unavailability.
- Fixed an issue that can cause a database instance to restart due to a memory management issue in storage node connection handling.
- Updated the following extensions:
  - PostGIS to version 3.6.3.
  - pg_partman to version 5.4.3.
  - PgTAP to version 1.3.4.
  - pgvector to version 0.8.2.
  - PgCollection to version 1.1.1.

PostgreSQL 18.3

This release of Aurora PostgreSQL is compatible with PostgreSQL 18.3. For more information about the improvements in PostgreSQL 18.3, see PostgreSQL release 18.3.

Releases and patches

- Aurora PostgreSQL 18.3.3, July 20, 2026
- Aurora PostgreSQL 18.3, June 11, 2026

Aurora PostgreSQL 18.3.3, July 20, 2026

Critical stability enhancements

- Fixed an issue that in rare cases could prevent failovers from completing to the intended failover target.
- Fixed an issue that in rare cases could lead to database unavailability for read node clusters after a restart.
- Fixed an issue with the multitransaction system that could cause database unavailability.
- Fixed an issue in Babelfish where table-valued parameters would store only the last row N times, where N is the total number of rows provided.
- Fixed an issue that improves B-tree prefetch performance when index scans were not properly utilizing prefetch buffers.

General enhancements

- Fixed an issue where GRANT SET ON PARAMETER incorrectly allowed permissions to be granted for non-existent extension parameters.
- Fixed an issue where an internal timeout during Zero-Downtime Patching could exceed its intended duration, causing unnecessary fallback to a standard restart with increased downtime.
- Fixed an issue where go-sqlcmd v1.9.0 failed to return query results.

Aurora PostgreSQL 18.3, June 11, 2026

New features

- The `ssl_tls13_ciphers` parameter is now available for configuring TLS v1.3 ciphers.

- PostgreSQL 18 introduces the `ssl_groups` parameter (formerly `ssl_ecdh_curve` in previous major versions) for configuring TLS key exchange curves.
- Default and allowed cipher lists have been updated to improve security posture and FIPS compliance.
- Note that `io_method`, `io_workers` and `io_max_concurrency` are community AIO GUCs and are not available in Aurora PostgreSQL. Aurora PostgreSQL uses its own async I/O implementation.
- Added support for Eager aggregation, which pushes aggregation before joins to improve query performance. Controlled by GUCs `enable_eager_aggregate` (default: OFF) and `min_eager_agg_group_size` to set the minimum average group size required to consider applying Eager aggregation (default: 8).
- The default value of `max_parallel_workers_per_gather` has been changed from 2 to 0, disabling parallel query execution by default. To re-enable parallel queries, modify this parameter in your custom parameter group. For guidance on the parallel query feature, see Best Practices for Parallel Queries in Aurora PostgreSQL.

Critical stability enhancements

- Fixed an issue which can lead to an unnecessary storage checkpoint during database startup leading to prolonged database startup time.
- Fixed a race condition that could prevents failovers from completing to intended failover target.

High priority enhancements

- Back-ported fixes for the following PostgreSQL community security issues:
  - CVE-2026-2003
  - CVE-2026-2004
  - CVE-2026-2005
  - CVE-2026-2006
  - CVE-2026-2007
  - CVE-2026-6472
  - CVE-2026-6473
  - CVE-2026-6474
  - CVE-2026-6475

- CVE-2026-6476
- CVE-2026-6477
- CVE-2026-6478
- CVE-2026-6479
- CVE-2026-6575
- CVE-2026-6637
- CVE-2026-6638

- Fixed an issue in cache initialization that could cause a crash during database startup.
- Fixed an issue in global databases planned switchover that would cause the switchover to be stuck waiting for a volume growth.
- Added the following new extensions:
  - pg_roaringbitmap version 1.1.0
- Updated the following extensions:
  - aws_s3 to version 2.0.
  - aws_lambda to version 2.1.
  - pg_bigm to version 1.2_20250903.
  - pg_hint_plan to version 1.8.0.
  - tds_fdw to version 2.0.5.
  - mysql_fdw to version REL-2_9_3.
  - pg_cron to version 1.6.7.
  - orafce to version 4.16.3.
  - hypopg to version 1.4.2.
  - pglogical to version 2.4.6.
  - pgvector to version 0.8.1.
  - pgrouting to version 3.8.0.
  - pg_repack to version 1.5.3.
  - oracle_fdw to version 2.8.0.
  - h3-pg to version 4.2.3.
  - PLv8 to version 3.2.4.
  - pg_tle to version 1.5.2.

- PgAudit to version 18.
- PostGIS to version 3.6.1.
- postgis_raster to version 3.6.1.
- postgis_tiger_geocoder to version 3.6.1.
- postgis_topology to version 3.6.1.
- address_standardizer to version 3.6.1.
- address_standardizer_data_us to version 3.6.1.
- Fixed an issue in the Aurora Storage Daemon that could lead to brief periods of unavailability when enhanced logical replication is enabled.

General enhancements

- Fixed max_wal_size configuration to properly trigger a checkpoint if WAL produced since the prior checkpoint exceeds the parameter value.
- Improved Aurora Replica availability by reducing buffer cache contention during write-ahead-log replay.
- Fixed an issue where the pg_hint_plan SET hint cannot set GUCs marked as PGC_RDSSUSET.
- Fixed an issue in the orafce extension which, in rare cases, can cause database unavailability.
- Fixed an issue where infinite recursion within a plv8 procedure could cause database unavailability.
- Fixed an issue where ALTER FUNCTION could fail with "routine name is not unique".
- Fixed an issue with the multitransaction system that could cause database unavailability.

PostgreSQL 17 versions

Version updates

- PostgreSQL 17.10
- PostgreSQL 17.9
- PostgreSQL 17.7
- PostgreSQL 17.6
- PostgreSQL 17.5
- PostgreSQL 17.4

- PostgreSQL 17.0

PostgreSQL 17.10

This release of Aurora PostgreSQL is compatible with PostgreSQL 17.10. For more information about the improvements in PostgreSQL 17.10, see PostgreSQL release 17.10.

Releases and patches

- Aurora PostgreSQL 17.10.1, August 21, 2026
- Aurora PostgreSQL 17.10, August 21, 2026

Aurora PostgreSQL 17.10.1, August 21, 2026

Critical stability enhancements

- Fixed an issue in the Aurora Storage Daemon that in rare cases could impact availability.

Aurora PostgreSQL 17.10, August 21, 2026

Critical stability enhancements

- Fixed an issue that in rare cases could lead to unavailability for Aurora Replica clusters after a restart.

High priority enhancements

- Back-ported fixes for the following PostgreSQL community security issues:
  - CVE-2026-6472
  - CVE-2026-6473
  - CVE-2026-6474
  - CVE-2026-6475
  - CVE-2026-6476
  - CVE-2026-6477
  - CVE-2026-6478
  - CVE-2026-6479

- CVE-2026-6575
- CVE-2026-6637
- CVE-2026-6638

- Fixed an issue that could cause upgrades to take a few seconds longer due to an unexpected termination of the logging process.
- Fixed an issue that in rare cases causes contention during extremely heavy write workloads, resulting in slower query progress and potential database unavailability.

General enhancements

- Improved Aurora storage metadata management memory usage when managing tens of millions of objects and files.
- Improved commit latency for Aurora Serverless instances when I/O optimized is enabled.
- Improved Aurora Replica availability and replay throughput by eliminating unnecessary buffer cache allocation and I/O during write-ahead-log replay for all operations.
- Fixed an issue in the Aurora storage daemon that in rare cases could cause brief periods of unavailability during a restart operation.
- Fixed an issue with suboptimal B-tree prefetch causing increased I/O wait times.
- Improved B-tree prefetch performance in scenarios where continued index scans were not properly utilizing prefetch buffers.
- Fixed an issue where an internal timeout during Zero-Downtime Patching could exceed its intended duration, causing unnecessary fallback to a standard restart with longer downtime.
- Added support for the `plv8.memory_limit` parameter, allowing customers to configure the memory limit for the plv8 extension. For more information, see plv8 documentation.
- Fixed an issue where GRANT SET ON PARAMETER on extension parameters could bypass intended parameter privilege restrictions. Grants on unregistered extension parameters are no longer permitted, and GRANT SET ON PARAMETER privileges on restricted parameters are no longer honored for non-superuser roles.
- Fixed a security issue in trusted PL/Perl that could allow privilege escalation.
- Fixed multiple security issues in trusted PL/Tcl that could allow code execution or cause brief periods of unavailability.
- Fixed a potential deadlock that could cause database shutdown to hang due to a lost wakeup race condition in the shutdown logic.

- Added a safety guard within a diagnostic logging function to prevent a crash.
- Fixed a race condition in encryption key initialization that could cause a brief period of unavailability.
- The pg_repack extension is now compatible with tables that are part of a zero-ETL integration.
- Fixed an issue where Zero-Downtime Patching (ZDP) could fall back to regular patching on inbound replicas, resulting in slightly higher downtime during maintenance operations.
- Fixed an issue with the multitransaction system that could cause database unavailability.
- Fixed an issue that can cause a database instance to restart due to a memory management issue in storage node connection handling.
- Updated the following extensions:
  - PostGIS to version 3.5.6.
  - pg_partman to version 5.4.3.
  - PgTAP to version 1.3.4.
  - pgvector to version 0.8.2.
  - PgCollection to version 1.1.1.

PostgreSQL 17.9

This release of Aurora PostgreSQL is compatible with PostgreSQL 17.9. For more information about the improvements in PostgreSQL 17.9, see PostgreSQL release 17.9.

Releases and patches

- Aurora PostgreSQL 17.9.3, July 20, 2026
- Aurora PostgreSQL 17.9.2, June 1, 2026
- Aurora PostgreSQL 17.9, April 6, 2026

Aurora PostgreSQL 17.9.3, July 20, 2026

Critical stability enhancements

- Fixed an issue that in rare cases could prevent failovers from completing to the intended failover target.
- Fixed an issue that in rare cases could lead to database unavailability for read node clusters after a restart.

- Fixed an issue with the multitransaction system that could cause database unavailability.
- Fixed an issue in Babelfish where table-valued parameters would store only the last row N times, where N is the total number of rows provided.
- Fixed an issue that improves B-tree prefetch performance when index scans were not properly utilizing prefetch buffers.

General enhancements

- Fixed an issue where GRANT SET ON PARAMETER incorrectly allowed permissions to be granted for non-existent extension parameters.
- Fixed an issue where an internal timeout during Zero-Downtime Patching could exceed its intended duration, causing unnecessary fallback to a standard restart with increased downtime.
- Fixed an issue where go-sqlcmd v1.9.0 failed to return query results.

Aurora PostgreSQL 17.9.2, June 1, 2026

Critical stability enhancements

- Fixed an issue with the multitransaction system that could cause database unavailability

High priority enhancements

- Fixed an issue with suboptimal B-tree prefetch causing increased I/O wait times.
- Back-ported fixes for the following PostgreSQL community security issues:
  - CVE-2026-6472
  - CVE-2026-6473
  - CVE-2026-6474
  - CVE-2026-6475
  - CVE-2026-6476
  - CVE-2026-6477
  - CVE-2026-6478
  - CVE-2026-6479
  - CVE-2026-6575
  - CVE-2026-6637

- CVE-2026-6638

Aurora PostgreSQL 17.9, April 6, 2026

New features

- Enhanced Aurora patch version upgrades to minimize downtime through reliable, simplified connection transfer and accelerated connection restoration.

Critical stability enhancements

- Fixed an issue which can lead to an unnecessary storage checkpoint during database startup leading to prolonged database startup time.
- Fixed a race condition that could prevents failovers from completing to intended failover target.
- Fixed a timing condition in the aws_s3 extension which, in rare cases, can cause database unavailability.
- Fixed an issue that may cause non-failover target reader instances to restart when they attempt to connect to the new writer instance following a failover.

High priority enhancements

- Fixed an issue in cache initialization that could cause a crash during database startup..
- Fixed an issue in the Aurora Storage Daemon that could lead to brief periods of unavailability when enhanced logical replication is enabled.
- Fixed an issue in global databases planned switchover that would cause the switchover to be stuck waiting for a volume growth.
- Back-ported fixes for the following PostgreSQL community security issues:
  - CVE-2026-2003
  - CVE-2026-2004
  - CVE-2026-2005
  - CVE-2026-2006
  - CVE-2026-2007

General enhancements

- Updated the following extensions:
  - aws_s3 to version 2.0.
  - pg_bigm to version 1.2_20250903.
  - pg_hint_plan to version 1.7.1.
  - tds_fdw to version 2.0.5.
  - mysql_fdw to version REL-2_9_3.
  - pg_cron to version 1.6.7.
  - orafce to version 4.16.3.
  - hypopg to version 1.4.2.
  - pglogical to version 2.4.6.
  - pgvector to version 0.8.1.
  - pg_repack to version 1.5.3.
  - oracle_fdw to version 2.8.0.
- Fixed small memory leaks during database startup and replication.
- Fixed an issue that could cause file handles to not be properly released after upgrade.
- Fixed max_wal_size configuration to properly trigger a checkpoint if WAL produced since the prior checkpoint exceeds the parameter value.
- Improved Aurora Replica availability by reducing buffer cache contention during write-ahead-log replay.
- Fixed an issue with pg_hint_plan where session configuration parameters requiring rds_superuser permissions could not be set in hints.
- Fixed an issue in the orafce extension which, in rare cases, can cause database unavailability.
- Fixed ANALYZE operations to work correctly on tables containing large LOB data.
- Fixed an issue where infinite recursion within a plv8 procedure could cause database unavailability.
- Fixed an issue where ALTER FUNCTION could fail with "routine name is not unique".

PostgreSQL 17.7

This release of Aurora PostgreSQL is compatible with PostgreSQL 17.7. For more information about the improvements in PostgreSQL 17.7, see PostgreSQL release 17.7.

Releases and patches

- Aurora PostgreSQL 17.7.5, July 20, 2026
- Aurora PostgreSQL 17.7.4, June 9, 2026
- Aurora PostgreSQL 17.7.3, May 29, 2026
- Aurora PostgreSQL 17.7.2, March 20, 2026
- Aurora PostgreSQL 17.7.1, January 16, 2026
- Aurora PostgreSQL 17.7, December, 18, 2025

Aurora PostgreSQL 17.7.5, July 20, 2026

Critical stability enhancements

- Fixed an issue that in rare cases could prevent failovers from completing to the intended failover target.
- Fixed an issue that in rare cases could lead to database unavailability for read node clusters after a restart.
- Fixed an issue in Babelfish where table-valued parameters would store only the last row N times, where N is the total number of rows provided.
- Fixed an issue that improves B-tree prefetch performance when index scans were not properly utilizing prefetch buffers.

General enhancements

- Fixed an issue where GRANT SET ON PARAMETER incorrectly allowed permissions to be granted for non-existent extension parameters.
- Fixed an issue where an internal timeout during Zero-Downtime Patching could exceed its intended duration, causing unnecessary fallback to a standard restart with increased downtime.

Aurora PostgreSQL 17.7.4, June 9, 2026

High priority enhancements

- Fixed an issue with suboptimal B-tree prefetch causing increased I/O wait times.
- Back-ported fixes for the following PostgreSQL community security issues:

- CVE-2026-6472
- CVE-2026-6473
- CVE-2026-6474
- CVE-2026-6475
- CVE-2026-6476
- CVE-2026-6477
- CVE-2026-6478
- CVE-2026-6479
- CVE-2026-6575
- CVE-2026-6637
- CVE-2026-6638

Aurora PostgreSQL 17.7.3, May 29, 2026

Critical stability enhancements

- Fixed an issue where ALTER FUNCTION could fail with "routine name is not unique".

Aurora PostgreSQL 17.7.2, March 20, 2026

Critical stability enhancements

- Fixed a bug in the aws_s3 extension which, in rare circumstances, can cause database unavailability.
- Fixed an issue where read nodes may restart when attempting to connect to the new write node following a failover.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2026-2003.
  - CVE-2026-2004.
  - CVE-2026-2005.
  - CVE-2026-2006.

- CVE-2026-2007.
- CVE-2026-3172.

- Fixed a bug in Query Plan Management that prevented plan capture.
- Fixed a bug in the Aurora Storage Daemon that could cause database unavailability in rare cases when enhanced logical replication is enabled.
- Fixed an issue where file handlers could remain improperly allocated after a major version upgrade.
- Fixed an issue where databases could run out of memory due to excessive storage metadata in rare circumstances.
- Fixed a bug in the logging utility that could cause database unavailability due to buffer overflow in rare circumstances.
- Fixed an issue in cache initialization that could cause database unavailability during startup.
- Fixed an issue where global databases planned switchover operations could become unresponsive while waiting for storage volume growth to complete.

General enhancements

- Fixed an issue where ANALYZE operations did not work correctly on tables containing large LOB data
- Fixed an issue where correlated any transform could return an error message 'failed to build any 3-way joins' during transformation.
- Fixed an issue where optimization was not triggered due to incorrect tracking of transaction metadata.

Aurora PostgreSQL 17.7.1, January 16, 2026

Critical stability enhancements

- Fixed a timing condition in the aws_s3 extension which, in rare cases, can cause database unavailability

Aurora PostgreSQL 17.7, December, 18, 2025

New features

- Introduced a change which improves static availability of Aurora PostgreSQL writers when, in rare conditions, write operations to storage are delayed due to undergoing storage node maintenance.
- Improvements to minimize switchover downtime during Blue/Green switchover operations, by temporarily blocking transaction commit operations on the Blue environment prior to switchover, reducing drift between the Blue and Green clusters.
- Improved recovery time by optimizing commit log (clog) loading during database cold starts and unplanned restarts, with significant benefits for smaller instances with limited CPU cores.

Critical stability enhancements

- Improved cold start performance through faster cache initialization.
- Reduced memory footprint for idle connections in Serverless v2 instances.

High priority enhancements

- Back-ported fixes for the following PostgreSQL community security issues:
  - CVE-2025-12818
  - CVE-2025-12817
- Fixed a database shutdown issue that could cause major version upgrades to fail.
- Fixed a rare major version upgrade failure with large memory allocations.
- Fixed an issue preventing rds_superuser from managing prepared transactions owned by other users.

General enhancements

- Updated the following extensions:
  - h3_pg to version 4.2.3.
- Fixed NOTIFY channel file cleanup issue that could cause excessive storage usage
- Fixed a race condition in Postgres lock release with optimized read enabled
- Improved PgAudit memory usage during parameter-heavy operations.
- Fixed a database initialization failure when max_connections is set to low values.
- Improved Serverless v2 scaling performance under high CPU load.

- Improved Serverless v2 write performance.
- Fixed delays in Serverless v2 scale-down operations.
- Fixed multiple low-risk memory leaks.
- Improved database shutdown during maintenance to enhance availability.
- Improved database startup performance through optimized storage initialization.
- Fixed storage metadata initialization issue that could delay engine startup.
- Fixed region determination failures in aws_s3, aws_ml, and aws_lambda extensions.
- Provided configuration in pg_columnmask extension's masking policies to allow predicates on masked columns in queries.
- Fixed role argument quoting in pg_columnmask policy management procedures.
- Fixed policy visibility in the pg_columnmask.ddm_policies view for administrators.
- Fixed a crash condition when using pg_buffercache extension during Serverless v2 scaling.

PostgreSQL 17.6

This release of Aurora PostgreSQL is compatible with PostgreSQL 17.6. For more information about the improvements in PostgreSQL 17.6, see PostgreSQL release 17.6.

Releases and patches

- Aurora PostgreSQL 17.6.5, July 20, 2026
- Aurora PostgreSQL 17.6.4, June 12, 2026
- Aurora PostgreSQL 17.6.2, April 22, 2026
- Aurora PostgreSQL 17.6.1, November 25, 2025
- Aurora PostgreSQL 17.6, November 25, 2025

Aurora PostgreSQL 17.6.5, July 20, 2026

Critical stability enhancements

- Fixed an issue in Babelfish where table-valued parameters would store only the last row N times, where N is the total number of rows provided.
- Fixed an issue that improves B-tree prefetch performance when index scans were not properly utilizing prefetch buffers.

General enhancements

- Fixed an issue where GRANT SET ON PARAMETER incorrectly allowed permissions to be granted for non-existent extension parameters.

Aurora PostgreSQL 17.6.4, June 12, 2026

High priority enhancements

- Fixed an issue with suboptimal B-tree prefetch causing increased I/O wait times.
- Back-ported fixes for the following PostgreSQL community security issues:
  - CVE-2026-6472
  - CVE-2026-6473
  - CVE-2026-6474
  - CVE-2026-6475
  - CVE-2026-6476
  - CVE-2026-6477
  - CVE-2026-6478
  - CVE-2026-6479
  - CVE-2026-6575
  - CVE-2026-6637
  - CVE-2026-6638

Aurora PostgreSQL 17.6.2, April 22, 2026

Critical stability enhancements

- Fixed a bug in the aws_s3 extension which, in rare circumstances, can cause database unavailability.
- Fixed an issue where read nodes may restart when attempting to connect to the new write node following a failover.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:

- CVE-2026-2003.
- CVE-2026-2004.
- CVE-2026-2005.
- CVE-2026-2006.
- CVE-2026-2007.
- CVE-2026-3172.

- Fixed a bug in Query Plan Management that prevented plan capture.
- Fixed a bug in the Aurora Storage Daemon that could cause database unavailability in rare cases when enhanced logical replication is enabled.
- Fixed an issue that can result in reader unavailability during catching up with the writer instance
- Fixed an issue where file handlers could remain improperly allocated after a major version upgrade.
- Fixed an issue where databases could run out of memory due to excessive storage metadata in rare circumstances.
- Fixed an issue in cache initialization that could cause database unavailability during startup.
- Fixed an issue where global databases planned switchover operations could become unresponsive while waiting for storage volume growth to complete.

General enhancements

- Fixed an issue where ANALYZE operations did not work correctly on tables containing large LOB data
- Fixed an issue to reduce CPU overhead while establishing Encryption in Transit between the database engine and the storage layer.
- Fixed improper handling of empty response during connection loss with storage nodes
- Fixed an issue where correlated any transform could return an error message 'failed to build any 3-way joins' during transformation.
- Fixed an issue where optimization was not triggered due to incorrect tracking of transaction metadata.
- Fixed an issue where ALTER FUNCTION could fail with "routine name is not unique".

Aurora PostgreSQL 17.6.1, November 25, 2025

Critical stability enhancements

- Fixed a database shutdown issue which could cause major version upgrade to fail.
- Fixed an Issue that could cause readers to restart or readers cannot perform read operations due to missing storage segments

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-12817
  - CVE-2025-12818
- Fixed an issue with the cleanup of files created by NOTIFY channels, which could lead to high local storage usage.

General enhancements

- Fixed an issue that could cause delays in scaling down for Serverless V2 instances.
- Fixed IMDS throttling issues by reducing IMDS requests for region related information.

Aurora PostgreSQL 17.6, November 25, 2025

New features

- Introduced Dynamic Data Masking (DDM), a database-level security feature that protects sensitive data by masking column values before they are presented to database clients, without modifying the actual stored data. DDM enables organizations to control access to Personally Identifiable Information (PII) and other sensitive data through role-based masking policies that are applied dynamically at query execution time. For more details visit Dynamic Data Masking.
- Introduced Shared Plan Cache to reduce memory usage by sharing query plans between backend processes. For more information, see Shared Plan Cache.
- Added support for correlated subquery cache for EXISTS, NOT EXISTS, and row comparison subqueries, see here.
- Introduced a new feature to significantly reduce database downtime during restarts by initializing Aurora storage metadata in parallel and reducing contention during initialization.

- Added new pg_columnmask extension

Critical stability enhancements

- Fixed an issue related to Optimized Reads-enabled tiered cache functionality that might result in longer recovery times after a failover to Aurora replica instances.
- Fixed an issue where clusters with enhanced logical replication (aurora.enhanced_logical_replication) enabled could experience instance restarts when decoding DDL-heavy workloads.
- Fixed an issue where clusters with enhanced logical replication (aurora.enhanced_logical_replication) enabled could experience instance restarts due to improper handling of aborted transaction metadata during database startup.

High priority enhancements

- Back-ported fixes for the following PostgreSQL community security issues:
  - CVE-2025-8713
  - CVE-2025-8714
  - CVE-2025-8715
- Fixed an issue in logical replication where subscriber databases could skip replicating transactions after recovering from a crash.
- Fixed an issue which could prevent logical replication from resuming after upgrade.
- Fixed an issue which can cause vacuum operations to become blocked after the restart of an Aurora replica in a Global Database.
- Fixed a security issue when altering routine ownership.
- Fixed an issue causing query execution failure for execution plans using the "bitmap heap scan" access method.
- Fixed an issue impacting query execution performance for execution plans using the "bitmap heap scan" access method.

General enhancements

- Updated the following extensions:
  - oracle_fdw to version to 2.8.0

  - pg_repack extension to version 1.5.2
  - aws_lamba extension to version 2.0
- Improvements to the replay performance of the Aurora WAL replay process on read replica instances.
- Improved file metadata initialization times.
- Fixed an issue that caused reader instance to restart when attempting to create PostgreSQL SLRU files.
- Fixed an issue which caused prolonged Serverless v2 scaling time.
- Fixed an issue that could cause database restart during Serverless v2 scaling.
- Fixed a performance issue on 48xlarge graviton instances.
- Fixed a timing issue in replication diagnostics that could prevent accurate reporting of Aurora replica recovery status when state transitions occur in rapid succession.
- Updated the aws_lambda extension to version 2.0, which resolves a performance issue that was present in version 1.0.
- Added support to include Geodetic TIFF grid files for PROJ.
- Fixed an issue that could cause database restart during aws_s3 export.
- Addressed an issue with logging when replication slots are invalidated.
- Fixed CVE-2023-3079 for V8 Engine in the PLV8 extension.
- Fixed an issue with parallel heap scans that could lead to index inconsistency on tables larger than 16TiB when synchronize_seqscans is enabled.
- Fixed an issue where read queries may time out on Aurora replica nodes during the replay of lazy truncation triggered by vacuum on the writer node.
- Fixed a crash that occurred when using ST_AsGeoJSON after upgrading to a release containing PostGIS 3.5.1 without running postgis_extensions_upgrade.
- Fixed an issue which prevented online recovery of an Aurora Replica forcing offline recovery.

PostgreSQL 17.5

This release of Aurora PostgreSQL is compatible with PostgreSQL 17.5. For more information about the improvements in PostgreSQL 17.5, see PostgreSQL release 17.5.

Releases and patches

- Aurora PostgreSQL 17.5.6, July 29, 2026

- Aurora PostgreSQL 17.5.5, June 12, 2026
- Aurora PostgreSQL 17.5.4, January 15, 2026
- Aurora PostgreSQL 17.5.3, September 16, 2025
- Aurora PostgreSQL 17.5.2, August 8, 2025
- Aurora PostgreSQL 17.5.1, June 30, 2025
- Aurora PostgreSQL 17.5, June 30, 2025

Aurora PostgreSQL 17.5.6, July 29, 2026

Critical stability enhancements

- Fixed an issue in Babelfish where table-valued parameters would store only the last row N times, where N is the total number of rows provided.
- Fixed an issue that improves B-tree prefetch performance when index scans were not properly utilizing prefetch buffers.

General enhancements

- Fixed an issue where GRANT SET ON PARAMETER incorrectly allowed permissions to be granted for non-existent extension parameters.

Aurora PostgreSQL 17.5.5, June 12, 2026

Critical stability enhancements

- Fixed a bug in the aws_s3 extension which, in rare circumstances, can cause database unavailability.
- Fixed an issue where read nodes may restart when attempting to connect to the new write node following a failover.

High priority enhancements

- Fixed an issue with suboptimal B-tree prefetch causing increased I/O wait times.
- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2026-2003.

- CVE-2026-2004.
- CVE-2026-2005.
- CVE-2026-2006.
- CVE-2026-2007.
- CVE-2026-3172.
- CVE-2026-6472
- CVE-2026-6473
- CVE-2026-6474
- CVE-2026-6475
- CVE-2026-6476
- CVE-2026-6477
- CVE-2026-6478
- CVE-2026-6479
- CVE-2026-6575
- CVE-2026-6637
- CVE-2026-6638

- Fixed a bug in Query Plan Management that prevented plan capture.
- Fixed a bug in the Aurora Storage Daemon that could cause database unavailability in rare cases when enhanced logical replication is enabled.
- Fixed an issue that can result in reader crash during catching up with the writer instance.
- Fixed an issue in cache initialization that could cause database unavailability during startup.
- Fixed an issue where global databases planned switchover operations could become unresponsive while waiting for storage volume growth to complete.

Security enhancements

- Fixed a bug in the babelfish_set_role function that improved permission validation when setting roles.

General enhancements

- Fixed an issue to reduce CPU overhead while establishing Encryption in Transit between the database engine and the storage layer.
- Fixed improper handling of empty response during connection loss with storage nodes.
- Fixed an issue where correlated any transform could return an error message 'failed to build any 3-way joins' during transformation.
- Fixed an issue where ALTER FUNCTION could fail with "routine name is not unique".

Aurora PostgreSQL 17.5.4, January 15, 2026

Critical stability enhancements

- Fix an issue which could trigger a race in change data capture (CDC) volume expansion.
- Process cleanup improvements during zero downtime patching to ensure that all database processes are properly terminated, preventing shutdown stalls and improving zero downtime patching success.
- Fixed a database shutdown issue which could cause major version upgrade to fail.
- Fixed an Issue that could cause readers to restart or readers cannot perform read operations due to missing storage segments.

High priority enhancements

- Fixed an issue which could cause a restart during the start of logical replication data synchronization.
- Fixed an issue with the cleanup of files created by NOTIFY channels, which could lead to high local storage usage.
- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-12817.

    CVE-2025-12818.

General enhancements

- Fixed an issue that could cause delays in scaling down for Serverless V2 instances.
- Fixed IMDS throttling issues by reducing IMDS requests for region related information.

Aurora PostgreSQL 17.5.3, September 16, 2025

Critical stability enhancements

- Fixed an issue in engine minor and patch upgrades where in rare cases a backend can incorrectly process an interrupt early.
- Fixed an issue where minor version upgrades and patch upgrades might take a few seconds longer because the runtime process wasn't exiting gracefully.
- Fixed an issue related to Optimized Reads-enabled tiered cache functionality that might result in longer recovery times after a failover to Aurora replica instances.
- Fixed a security issue when altering routine ownership.
- Fixed an issue with Serverless v2 scaling that may cause unavailability when fetching pages from storage.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-8713.
  - CVE-2025-8714.
  - CVE-2025-8715.
- Backported fixes for the following PLv8 extension's V8 Engine security vulnerabilities:
  - CVE-2022-1364.
  - CVE-2023-3079.
- Fixed an issue that can cause reboots of the primary db instance when reading from a logical replication slot in the presence of frequent DDL if aurora.enhanced_logical_replication is enabled.
- Fixed a race condition where old writer instance may not step down after a new writer instance is promoted and continues to write.

General enhancements

- Fixed an issue that could prevent online recovery of an Aurora Replica from completing.
- Fixed an issue that could cause unavailability when `apg_plan_mgmt` is enabled.

- Fixed an issue with parallel heap scans that could lead to index inconsistency on tables larger than 16TiB when synchronize_seqscans is enabled.
- Fixed an issue in Query Plan Management with running a utility statement immediately after installing the extension or resetting shared memory.
- Fixed an issue with Babelfish ZDP that could lead to instance reboot after minor version ugprade in some cases.
- Fixed an issue in enforcing, validating and evolving the `plans` extension in Query Plan Management.
- Fixed an issue during numeric calculations involving aggregate functions with all-column selections.
- Fixed an issue that could cause prolonged Serverless v2 scaling time.
- Fixed a crash that occurred when using ST_AsGeoJSON after upgrading to a release containing The `PostGIS` extension 3.5.1 without running postgis_extensions_upgrade.
- Fixed an issue causing a replica restart during the replica join case.
- Fixed an issue which can cause vacuum operations to become blocked after the restart of an Aurora replica in a Global Database.
- Fixed an issue causing query execution failure for execution the `plans` extension using the “bitmap heap scan” access method.
- Fixed an issue impacting query execution performance for execution the `plans` extension using the “bitmap heap scan” access method.
- Fixed and issue where storage client may crash during instance restart.

Aurora PostgreSQL 17.5.2, August 8, 2025

Critical stability enhancements

- Fixed an issue which could prevent logical replication from resuming after upgrade.
- Fixed an issue with Serverless v2 scaling that may cause unavailability when performing reads from Aurora Storage.

Aurora PostgreSQL 17.5.1, June 30, 2025

High priority enhancements

- Fixed a performance issue affecting instance restart operations.

- Fixed an issue where newly created storage volume keys were incorrectly cleaned up causing periodic restarts.

Aurora PostgreSQL 17.5, June 30, 2025

New features

- Improved Serverless v2 scaling for storage bound workloads.
- Improved Serverless v2 scaling through optimized management of memory maps.
- Aurora has doubled its maximum storage capacity from 128 TiB to 256 TiB. This increased storage limit allows customers to manage larger workloads in a single DB cluster. To access the increased storage limit for Aurora PostgreSQL, upgrade your DB cluster to version 17.5, 16.9, 15.13, or higher. Once upgraded, Aurora storage will automatically scale up to 256 TiB capacity based on the amount of data in the cluster volume.

Critical stability enhancements

- Fixed an issue where Serverless instances would fail to perform Zero Downtime Patching after automatic resume.
- Added library dependency verification during minor and patch upgrades to ensure storage metadata recovery is safe before proceeding.

High priority enhancements

- Fixed an issue in the rds_activity_stream extension that could cause brief periods of unavailability during configuration reloads.
- Fixed an issue where server will fail to start if a previous startup was prematurely terminated.

General enhancements

- Updated the following extensions:
  - apg_plan_mgmt to 2.9.
  - The `pgaudit` extension to 17.1.
  - The `rdkit` extension to 4.6.1 (2024_09_6).
- Improvements to make Serverless v2 scaling more efficient on reader nodes.

- Fixed an issue related to the interactions between out-of-row storage and aborted sub-transactions that could cause issues in logical streaming when aurora.enhanced_logical_replication is enabled.
- Fixed an issue that prevents Zero Downtime Patching from completing successfully on Serverless v2 auto-pause enabled instances.
- Fixed an issue in pgdam that causes the engine (with pgdam enabled) to crash when hitting maximum connections.
- Fixed an issue in the `pg_bigm` extension that can cause unavailability when the extension interacts with the GIN index.
- In Blue/Green deployments, creating or modifying temporary objects is no longer classified as restricted DDL.
- Added validation to ensure only predefined GUCs with `aurora_stat_plans` the `prefix` extension are accepted on SET or SHOW commands.
- Added function aurora_stat_resource_usage() to report current CPU usage, allocated and used memory for all the backends.
- Fixed an issue which prevented ZDP when cache recovery is disabled.
- Fixed a synchronization issue where ZDP could fail due to premature engine ready state reporting.
- Fixed an issue in checkpoint replication to have storage metadata position be consistent in reader.
- Fixed an issue which causes RO node to restart while it's reconnecting to RW node.
- Fixed an issue which causes instability to Zero-ETL integrations due to stale caches in the presence of frequent ALTER TABLE commands.
- Fixed an issue where RO client process can be stuck in LWLock:BufferIO wait event after being disconnected from the writer.
- Fixed an issue where RO node could crash when frequently falling behind RW node.
- Fixed an issue in the `aws_s3` extension that could cause an import operation to restart and reinsert previously inserted rows.
- Improved performance of EXPLAIN operations for queries involving tables with many columns and complex relations.
- Added separate GUC `apg_enable_correlated_scalar_index_transform` (OFF by default) to control whether to transform the correlated subquery when the correlated column in the inner table is a leading column of any index.

PostgreSQL 17.4

This release of Aurora PostgreSQL is compatible with PostgreSQL 17.4. For more information about the improvements in PostgreSQL 17.4, see PostgreSQL release 17.4.

Releases and patches

- Aurora PostgreSQL 17.4.8, August 05, 2026
- Aurora PostgreSQL 17.4.7, June 26, 2026
- Aurora PostgreSQL 17.4.6, May 07, 2026
- Aurora PostgreSQL 17.4.5, February 02, 2026
- Aurora PostgreSQL 17.4.4, October 9, 2025
- Aurora PostgreSQL 17.4.3, June 03, 2025
- Aurora PostgreSQL 17.4.2, May 01, 2025
- Aurora PostgreSQL 17.4, May 01, 2025

Aurora PostgreSQL 17.4.8, August 05, 2026

Critical stability enhancements

- Fixed an issue in Babelfish where table-valued parameters would store only the last row N times, where N is the total number of rows provided.
- Fixed an issue that improves B-tree prefetch performance when index scans were not properly utilizing prefetch buffers.

General enhancements

- Fixed an issue where GRANT SET ON PARAMETER incorrectly allowed permissions to be granted for non-existent extension parameters.
- Fixed a performance issue with REINDEX operations on certain variable-size data types.

Aurora PostgreSQL 17.4.7, June 26, 2026

High priority enhancements

- Fixed an issue with suboptimal B-tree prefetch causing increased I/O wait times.

- Back-ported fixes for the following PostgreSQL community security issues:
  - CVE-2026-6472
  - CVE-2026-6473
  - CVE-2026-6474
  - CVE-2026-6475
  - CVE-2026-6476
  - CVE-2026-6477
  - CVE-2026-6478
  - CVE-2026-6479
  - CVE-2026-6575
  - CVE-2026-6637
  - CVE-2026-6638

Aurora PostgreSQL 17.4.6, May 07, 2026

Critical stability enhancements

- Fixed a bug in the aws_s3 extension which, in rare circumstances, can cause database unavailability.
- Fixed an issue where read nodes may restart when attempting to connect to the new write node following a failover.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2026-2003.
  - CVE-2026-2004.
  - CVE-2026-2005.
  - CVE-2026-2006.
  - CVE-2026-2007.
  - CVE-2026-3172.
- Fixed a bug in Query Plan Management that prevented plan capture.

- Fixed a bug in the Aurora Storage Daemon that could cause database unavailability in rare cases when enhanced logical replication is enabled.
- Fixed an issue that can result in reader unavailability during catching up with the writer instance
- Fixed an issue in cache initialization that could cause database unavailability during startup.
- Fixed an issue where global databases planned switchover operations could become unresponsive while waiting for storage volume growth to complete.

General enhancements

- Fixed an issue to reduce CPU overhead while establishing Encryption in Transit between the database engine and the storage layer.
- Fixed an issue where correlated any transform could return an error message 'failed to build any 3-way joins' during transformation.
- Fixed an issue where ALTER FUNCTION could fail with "routine name is not unique".

Aurora PostgreSQL 17.4.5, February 02, 2026

Critical stability enhancements

- Fixed an issue that could cause garbage collection to get blocked on a change data capture (CDC) volume.
- Fix an issue which could trigger a race in change data capture (CDC) volume expansion.
- Process cleanup improvements during zero downtime patching to ensure that all database processes are properly terminated, preventing shutdown stalls and improving zero downtime patching success.
- Fixed a database shutdown issue which could cause major version upgrade to fail.
- Fixed an Issue that could cause readers to restart or readers cannot perform read operations due to missing storage segments.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-12817.
  - CVE-2025-12818.

- Fixed an issue which could cause a restart during the start of logical replication data synchronization.
- Fixed an issue where premature status updates during zero downtime patching could cause unnecessary failures by ensuring proper synchronization with server startup.
- Fixed an issue with the cleanup of files created by NOTIFY channels, which could lead to high local storage usage.

General enhancements

- Fixed IMDS throttling issues by reducing IMDS requests for region related information.

Aurora PostgreSQL 17.4.4, October 9, 2025

Critical stability enhancements

- Fixed an issue in engine minor and patch upgrades where in rare cases a backend can incorrectly process an interrupt early.
- Fixed an issue where minor version upgrades and patch upgrades might take a few seconds longer because the runtime process wasn't exiting gracefully.
- Fixed an issue related to Optimized Reads-enabled tiered cache functionality that might result in longer recovery times after a failover to Aurora replica instances.
- Fixed a security issue when altering routine ownership.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-8713.
  - CVE-2025-8714.
  - CVE-2025-8715.
- Backported fixes for the following PLv8 extension's V8 Engine security vulnerabilities:
  - CVE-2022-1364.
  - CVE-2023-3079.
- Fixed a race condition where old writer instance may not step down after a new writer instance is promoted and continues to write.

General enhancements

- Fixed an issue that could prevent online recovery of an Aurora Replica from completing.
- Fixed an issue that could cause unavailability when `apg_plan_mgmt` is enabled.
- Fixed an issue with parallel heap scans that could lead to index inconsistency on tables larger than 16TiB when synchronize_seqscans is enabled.
- Fixed an issue in Query Plan Management with running a utility statement immediately after installing the extension or resetting shared memory.
- Fixed an issue in enforcing, validating and evolving the `plans` extension in Query Plan Management.
- Fixed an issue during numeric calculations involving aggregate functions with all-column selections.
- Fixed an issue that could cause prolonged Serverless v2 scaling time.
- Fixed a crash that occurred when using ST_AsGeoJSON after upgrading to a release containing The `PostGIS` extension 3.5.1 without running postgis_extensions_upgrade.
- Fixed an issue causing a replica restart during the replica join case.
- Fixed an issue which can cause vacuum operations to become blocked after the restart of an Aurora replica in a Global Database.
- Fixed an issue causing query execution failure for execution the `plans` extension using the “bitmap heap scan” access method.
- Fixed an issue impacting query execution performance for execution the `plans` extension using the “bitmap heap scan” access method.
- Fixed and issue where storage client may crash during instance restart.

Aurora PostgreSQL 17.4.3, June 03, 2025

Critical stability enhancements

- Fixed stuck scaling for serverless db instances with zero-ETL enabled.
- Fixed an issue which can cause the database to become unresponsive when performing actions with Aurora Storage.
- Fixed an issue related to the interaction between Aurora Serverless scaling and the improved reader availability functionality that might result in longer recover times and impact availability.

- Fixed an issue in the `rds_activity_stream` extension that could cause brief periods of unavailability during configuration reloads and when maximum connections are consumed.
- Fixed an issue in handling parameter lists from previous versions of query plan management.

General enhancements

- Fixed an issue in handling of asynchronous I/O cancellation that could cause processes to become stuck indefinitely.
- Fixed an issue related to the interactions between out-of-row storage and aborted subtransactions that could cause issues in logical streaming when `aurora.enhanced_logical_replication` is enabled.
- Fixed an issue where unexpected internal communication channel re-establishments may cause increased latency on data processing.
- Added support of newly released Regions for the `aws_s3` extension.
- Fixed an issue that can cause process stuck indefinitely at LWLock:BufferIO wait event.
- Fixed an issue that can cause RO instance crash under heavy workload.
- Fixed an issue that causes minor version upgrades to fail with sleep/wake feature.

Aurora PostgreSQL 17.4.2, May 01, 2025

Critical priority enhancements

- Fixed stuck scaling for serverless db instances with zero-ETL enabled.
- Fixed an issue which can cause the database to become unresponsive when performing actions with Aurora storage.

Aurora PostgreSQL 17.4, May 01, 2025

New features

- Aurora Optimized Reads now enables users to resize the allocated space for Optimized Reads-enabled temporary objects on Aurora I/O-Optimized clusters using a dynamic parameter `aurora_temp_space_size`. For more information, see Aurora Optimized Reads.

- Added support for transforming correlated subquery into derived table to improve execution efficiency. For more information, see Improving Aurora PostgreSQL query performance using subquery transformation .
- Added support for caching the result of correlated subquery to improve execution efficiency. For more information, see Using subquery cache to improve Aurora PostgreSQL query performance.
- Added adaptive join (preview feature) to dynamically optimize query performance by switching from nested loop to hash join operations at runtime when the PostgreSQL optimizer makes suboptimal join choices due to cardinality estimate errors. For more information on adaptive join, see Improving query performance using adaptive join.

Critical stability enhancements

- When the system is under critical memory pressure for an extended duration, the largest customer backend will be cancelled to prevent system from restarting due to out of memory.

High priority enhancements

- The `rds.force_ssl` parameter is now set to 1 (on) by default in version 17 and newer versions, enforcing SSL connections for enhanced security. For more information, see Requiring an SSL/TLS connection to an Aurora PostgreSQL DB cluster.
- Fixed an issue where Aurora in-Region failovers would result in failures in database startup.
- Fixed a security issue in the `rds_activity_stream` extension.
- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-1094.

General enhancements

- Enabled support for FIPS-validated cryptography, a fully owned AWS implementation. For more information, see AWS-LC is now FIPS 140-3 certified on AWS Security Blog.
- Aurora storage metadata now initializes more quickly during unplanned failovers and server restarts, reducing overall downtime. Larger instances benefit the most by leveraging higher parallelism.
- Improved performance of file metadata operations.
- Made improvements to database downtime during a `planned` extension switchover for Global Databases.

- In Blue/Green deployments, creating or modifying temporary objects is no longer classified as restricted DDL.
  - Creating temporary objects with syntax such as CREATE TEMPORARY TABLE x AS SELECT * FROM isn't supported.
  - Creating indexes on temporary tables isn't supported.
- The Blue/Green deployment switchover won't be blocked by the `REFRESH MATERIALIZED VIEW` statement.
- Updated the following parameter names to align with the PostgreSQL 17 version:
  - `multixact_offsets_cache_size` is now `multixact_offset_buffers`
  - `multixact_members_cache_size` is now `multixact_member_buffers`
- Improved allocation of Write-Ahead Log (WAL) stream numbers, resulting in increased throughput for write-heavy workloads on the new Graviton 4 high-end instances.
- Fixed an issue where the query identifier (queryid) wasn't being correctly updated in pg_stat_activity when using extended protocol in pipeline mode.
- Fixed an issue in handling of asynchronous I/O cancellation that could cause processes to become stuck indefinitely.
- Updated the following extensions:
  - `pgvector` extension to 0.8.0.
  - `pg_cron` extension to v1.6.5.
  - `tds_fdw` extension to 2.0.4.
  - `postgis` extension to 3.5.1.
  - `pg_partman` extension to v5.2.4.
  - `orafce` extension to 4.14.0.
  - `rds_tools` extension to 1.9.
  - `rdkit` extension to Release_2024_09_3.
  - pg_repack extension to 1.5.1.
  - pglogical extension to 2.4.5.

PostgreSQL 17.0

This release of Aurora PostgreSQL is compatible with PostgreSQL 17.0. For more information about the improvements in PostgreSQL 17.0, see PostgreSQL release 17.0.

To learn more on how to work with Database preview environment, see Working with the database preview environment.

Releases and patches

- Aurora PostgreSQL 17.0 in the Amazon RDS Preview environment, November 20, 2024

Aurora PostgreSQL 17.0 in the Amazon RDS Preview environment, November 20, 2024

⚠ ***This is preview documentation for Amazon Aurora PostgreSQL version 17.0. It is subject to change.***

General enhancements

- Reduced commit latency when I/O optimized is enabled.

Unsupported features in the preview version of Aurora PostgreSQL 17.0

- Logical decoding on Aurora Read Replicas.
- Failover control within a database cluster.
- `pg_createsubscriber` on Aurora Read Replicas.
- Aurora PostgreSQL query plan management.
- Aurora PostgreSQL local write forwarding.

⚠ **Important**

The Aurora PostgreSQL 17.0 preview release includes fixes for recent PostgreSQL CVEs. These fixes may affect your login roles.
For details on the CVEs, see the PostgreSQL release announcement.
For information about the potential impact on login roles, refer to this PostgreSQL mailing list post.

PostgreSQL 16 versions (includes some deprecated versions)

Migrating to Aurora PostgreSQL 16

The following minumum extension versions are required for major version upgrade to Aurora PostgreSQL 16:

- PostGIS version 3.1
- PgRouting version 3.0.5
- Rdkit version 4.2

For more information on migration, see Migration to Version 16 and Migration to Version 16.1.

For information about supported extensions versions for each Aurora PostgreSQL version, see Extensions supported for Amazon Aurora PostgreSQL.

To upgrade your Aurora PostgreSQL DB cluster including upgrading your extensions, see Upgrading PostgreSQL extensions.

Unsupported Features

- Aurora PostgreSQL 16 versions doesn't currently support logical decoding on Aurora Read Replicas.

Differences between PostgreSQL 16 and Aurora PostgreSQL 16

In Aurora PostgreSQL 16 versions, the newly introduced `pg_stat_io` view has two additional I/O contexts:

- `index`: I/O operations performed during index creation.
- `walreplay`: I/O operations performed by the wal replay process on Aurora read replicas.

The following backend types and I/O contexts are not applicable to Aurora read replicas:

- autovacuum launcher
- autovacuum worker
- bulkwrite

- index
- vacuum

In addition, Aurora PostgreSQL doesn't support writebacks and sync operations since data is persisted to Aurora storage.

Version updates

- PostgreSQL 16.14
- PostgreSQL 16.13
- PostgreSQL 16.11
- PostgreSQL 16.10
- PostgreSQL 16.9
- PostgreSQL 16.8
- PostgreSQL 16.6 (Deprecated)
- PostgreSQL 16.4 (Deprecated)
- PostgreSQL 16.3 (Deprecated)
- PostgreSQL 16.2 (Deprecated)
- PostgreSQL 16.1 (Deprecated)

PostgreSQL 16.14

This release of Aurora PostgreSQL is compatible with PostgreSQL 16.14. For more information about the improvements in PostgreSQL 16.14, see PostgreSQL release 16.14.

Releases and patches

- Aurora PostgreSQL 16.14.1, August 21, 2026
- Aurora PostgreSQL 16.14, August 21, 2026

Aurora PostgreSQL 16.14.1, August 21, 2026

Critical stability enhancements

- Fixed an issue in the Aurora Storage Daemon that in rare cases could impact availability.

Aurora PostgreSQL 16.14, August 21, 2026

Critical stability enhancements

- Fixed an issue that in rare cases could lead to unavailability for Aurora Replica clusters after a restart.

High priority enhancements

- Back-ported fixes for the following PostgreSQL community security issues:
  - CVE-2026-6472
  - CVE-2026-6473
  - CVE-2026-6474
  - CVE-2026-6475
  - CVE-2026-6476
  - CVE-2026-6477
  - CVE-2026-6478
  - CVE-2026-6479
  - CVE-2026-6575
  - CVE-2026-6637
  - CVE-2026-6638
- Fixed an issue that could cause upgrades to take a few seconds longer due to an unexpected termination of the logging process.

General enhancements

- Improved Aurora storage metadata management memory usage when managing tens of millions of objects and files.
- Improved commit latency for Aurora Serverless instances when I/O optimized is enabled.
- Improved Aurora Replica availability and replay throughput by eliminating unnecessary buffer cache allocation and I/O during write-ahead-log replay for all operations.
- Fixed an issue in the Aurora storage daemon that in rare cases could cause brief periods of unavailability during a restart operation.

- Fixed an issue where an internal timeout during Zero-Downtime Patching could exceed its intended duration, causing unnecessary fallback to a standard restart with longer downtime.
- Added support for the `plv8.memory_limit` parameter, allowing customers to configure the memory limit for the plv8 extension. For more information, see plv8 documentation.
- Fixed an issue where GRANT SET ON PARAMETER on extension parameters could bypass intended parameter privilege restrictions. Grants on unregistered extension parameters are no longer permitted, and GRANT SET ON PARAMETER privileges on restricted parameters are no longer honored for non-superuser roles.
- Fixed a security issue in trusted PL/Perl that could allow privilege escalation.
- Fixed multiple security issues in trusted PL/Tcl that could allow code execution or cause brief periods of unavailability.
- Fixed a potential deadlock that could cause database shutdown to hang due to a lost wakeup race condition in the shutdown logic.
- Added a safety guard within a diagnostic logging function to prevent a crash.
- Fixed a race condition in encryption key initialization that could cause a brief period of unavailability.
- The pg_repack extension is now compatible with tables that are part of a zero-ETL integration.
- Fixed an issue where Zero-Downtime Patching (ZDP) could fall back to regular patching on inbound replicas, resulting in slightly higher downtime during maintenance operations.
- Fixed an issue with the multitransaction system that could cause database unavailability.
- Fixed an issue that can cause a database instance to restart due to a memory management issue in storage node connection handling.
- Updated the following extensions:
  - PostGIS to version 3.5.6.
  - pg_partman to version 5.4.3.
  - PgTAP to version 1.3.4.
  - pgvector to version 0.8.2.
  - PgCollection to version 1.1.1.

PostgreSQL 16.13

This release of Aurora PostgreSQL is compatible with PostgreSQL 16.13. For more information about the improvements in PostgreSQL 16.13, see PostgreSQL release 16.13.

Releases and patches

- Aurora PostgreSQL 16.13.3, July 20, 2026
- Aurora PostgreSQL 16.13.2, June 1, 2026
- Aurora PostgreSQL 16.13, April 6, 2026

Aurora PostgreSQL 16.13.3, July 20, 2026

Critical stability enhancements

- Fixed an issue that in rare cases could prevent failovers from completing to the intended failover target.
- Fixed an issue that in rare cases could lead to database unavailability for read node clusters after a restart.
- Fixed an issue with the multitransaction system that could cause database unavailability.
- Fixed an issue in Babelfish where table-valued parameters would store only the last row N times, where N is the total number of rows provided.
- Fixed an issue that improves B-tree prefetch performance when index scans were not properly utilizing prefetch buffers.

General enhancements

- Fixed an issue where GRANT SET ON PARAMETER incorrectly allowed permissions to be granted for non-existent extension parameters.
- Fixed an issue where an internal timeout during Zero-Downtime Patching could exceed its intended duration, causing unnecessary fallback to a standard restart with increased downtime.
- Fixed an issue where go-sqlcmd v1.9.0 failed to return query results.

Aurora PostgreSQL 16.13.2, June 1, 2026

Critical stability enhancements

- Fixed an issue with the multitransaction system that could cause database unavailability

High priority enhancements

- Fixed an issue with suboptimal B-tree prefetch causing increased I/O wait times.
- Back-ported fixes for the following PostgreSQL community security issues:
  - CVE-2026-6472
  - CVE-2026-6473
  - CVE-2026-6474
  - CVE-2026-6475
  - CVE-2026-6476
  - CVE-2026-6477
  - CVE-2026-6478
  - CVE-2026-6479
  - CVE-2026-6575
  - CVE-2026-6637
  - CVE-2026-6638

Aurora PostgreSQL 16.13, April 6, 2026

New features

- Enhanced Aurora patch version upgrades to minimize downtime through reliable, simplified connection transfer and accelerated connection restoration.

Critical stability enhancements

- Fixed an issue which can lead to an unnecessary storage checkpoint during database startup leading to prolonged database startup time.
- Fixed a race condition that could prevents failovers from completing to intended failover target.
- Fixed a timing condition in the aws_s3 extension which, in rare cases, can cause database unavailability.
- Fixed an issue that may cause non-failover target reader instances to restart when they attempt to connect to the new writer instance following a failover.

High priority enhancements

- Fixed an issue in cache initialization that could cause a crash during database startup..

- Fixed an issue in the Aurora Storage Daemon that could lead to brief periods of unavailability when enhanced logical replication is enabled.
- Fixed an issue in global databases planned switchover that would cause the switchover to be stuck waiting for a volume growth.
- Back-ported fixes for the following PostgreSQL community security issues:
  - CVE-2026-2003
  - CVE-2026-2004
  - CVE-2026-2005
  - CVE-2026-2006
  - CVE-2026-2007

General enhancements

- Updated the following extensions:
  - aws_s3 to version 2.0.
  - pg_bigm to version 1.2_20250903.
  - pg_hint_plan to version 1.6.2.
  - tds_fdw to version 2.0.5.
  - mysql_fdw to version REL-2_9_3.
  - pg_cron to version 1.6.7.
  - orafce to version 4.16.3.
  - hypopg to version 1.4.2.
  - pglogical to version 2.4.6.
  - pgvector to version 0.8.1.
  - pg_repack to version 1.5.3.
  - oracle_fdw to version 2.8.0.
- Fixed small memory leaks during database startup and replication.
- Fixed an issue that could cause file handles to not be properly released after upgrade.
- Fixed max_wal_size configuration to properly trigger a checkpoint if WAL produced since the prior checkpoint exceeds the parameter value.
- Improved Aurora Replica availability by reducing buffer cache contention during write-ahead-log replay.

- Fixed an issue with pg_hint_plan where session configuration parameters requiring rds_superuser permissions could not be set in hints.
- Fixed an issue in the orafce extension which, in rare cases, can cause database unavailability.
- Fixed ANALYZE operations to work correctly on tables containing large LOB data.
- Fixed an issue where infinite recursion within a plv8 procedure could cause database unavailability.
- Fixed an issue where ALTER FUNCTION could fail with "routine name is not unique".

PostgreSQL 16.11

This release of Aurora PostgreSQL is compatible with PostgreSQL 16.11. For more information about the improvements in PostgreSQL 16.11, see PostgreSQL release 16.11.

Releases and patches

- Aurora PostgreSQL 16.11.5, July 20, 2026
- Aurora PostgreSQL 16.11.4, June 9, 2026
- Aurora PostgreSQL 16.11.3, May 29, 2026
- Aurora PostgreSQL 16.11.2, March 20, 2026
- Aurora PostgreSQL 16.11.1, January 16, 2026
- Aurora PostgreSQL 16.11, December, 18, 2025

Aurora PostgreSQL 16.11.5, July 20, 2026

Critical stability enhancements

- Fixed an issue that in rare cases could prevent failovers from completing to the intended failover target.
- Fixed an issue that in rare cases could lead to database unavailability for read node clusters after a restart.
- Fixed an issue in Babelfish where table-valued parameters would store only the last row N times, where N is the total number of rows provided.
- Fixed an issue that improves B-tree prefetch performance when index scans were not properly utilizing prefetch buffers.

General enhancements

- Fixed an issue where GRANT SET ON PARAMETER incorrectly allowed permissions to be granted for non-existent extension parameters.
- Fixed an issue where an internal timeout during Zero-Downtime Patching could exceed its intended duration, causing unnecessary fallback to a standard restart with increased downtime.

Aurora PostgreSQL 16.11.4, June 9, 2026

High priority enhancements

- Fixed an issue with suboptimal B-tree prefetch causing increased I/O wait times.
- Back-ported fixes for the following PostgreSQL community security issues:
  - CVE-2026-6472
  - CVE-2026-6473
  - CVE-2026-6474
  - CVE-2026-6475
  - CVE-2026-6476
  - CVE-2026-6477
  - CVE-2026-6478
  - CVE-2026-6479
  - CVE-2026-6575
  - CVE-2026-6637
  - CVE-2026-6638

Aurora PostgreSQL 16.11.3, May 29, 2026

Critical stability enhancements

- Fixed an issue where ALTER FUNCTION could fail with "routine name is not unique".

Aurora PostgreSQL 16.11.2, March 20, 2026

Critical stability enhancements

- Fixed a bug in the aws_s3 extension which, in rare circumstances, can cause database unavailability.
- Fixed an issue where read nodes may restart when attempting to connect to the new write node following a failover.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2026-2003.
  - CVE-2026-2004.
  - CVE-2026-2005.
  - CVE-2026-2006.
  - CVE-2026-2007.
  - CVE-2026-3172.
- Fixed a bug in Query Plan Management that prevented plan capture.
- Fixed a bug in the Aurora Storage Daemon that could cause database unavailability in rare cases when enhanced logical replication is enabled.
- Fixed an issue where file handlers could remain improperly allocated after a major version upgrade.
- Fixed an issue where databases could run out of memory due to excessive storage metadata in rare circumstances.
- Fixed a bug in the logging utility that could cause database unavailability due to buffer overflow in rare circumstances.
- Fixed an issue in cache initialization that could cause database unavailability during startup.
- Fixed an issue where global databases planned switchover operations could become unresponsive while waiting for storage volume growth to complete.

General enhancements

- Fixed an issue where ANALYZE operations did not work correctly on tables containing large LOB data
- Fixed an issue where correlated any transform could return an error message 'failed to build any 3-way joins' during transformation.

- Fixed an issue where optimization was not triggered due to incorrect tracking of transaction metadata.

Aurora PostgreSQL 16.11.1, January 16, 2026

Critical stability enhancements

- Fixed a timing condition in the aws_s3 extension which, in rare cases, can cause database unavailability

Aurora PostgreSQL 16.11, December, 18, 2025

New features

- Introduced a change which improves static availability of Aurora PostgreSQL writers when, in rare conditions, write operations to storage are delayed due to undergoing storage node maintenance.
- Improvements to minimize switchover downtime during Blue/Green switchover operations, by temporarily blocking transaction commit operations on the Blue environment prior to switchover, reducing drift between the Blue and Green clusters.
- Improved recovery time by optimizing commit log (clog) loading during database cold starts and unplanned restarts, with significant benefits for smaller instances with limited CPU cores.

Critical stability enhancements

- Improved cold start performance through faster cache initialization.
- Reduced memory footprint for idle connections in Serverless v2 instances.

High priority enhancements

- Back-ported fixes for the following PostgreSQL community security issues:
  - CVE-2025-12818
  - CVE-2025-12817
- Fixed a database shutdown issue that could cause major version upgrades to fail.
- Fixed a rare major version upgrade failure with large memory allocations.

- Fixed an issue preventing rds_superuser from managing prepared transactions owned by other users.

General enhancements

- Updated the following extensions:
  - h3_pg to version 4.2.3.
- Fixed NOTIFY channel file cleanup issue that could cause excessive storage usage
- Fixed a race condition in Postgres lock release with optimized read enabled
- Improved PgAudit memory usage during parameter-heavy operations.
- Fixed a database initialization failure when max_connections is set to low values.
- Improved Serverless v2 scaling performance under high CPU load.
- Improved Serverless v2 write performance.
- Fixed delays in Serverless v2 scale-down operations.
- Fixed multiple low-risk memory leaks.
- Improved database shutdown during maintenance to enhance availability.
- Improved database startup performance through optimized storage initialization.
- Fixed storage metadata initialization issue that could delay engine startup.
- Fixed region determination failures in aws_s3, aws_ml, and aws_lambda extensions.
- Provided configuration in pg_columnmask extension's masking policies to allow predicates on masked columns in queries.
- Fixed role argument quoting in pg_columnmask policy management procedures.
- Fixed policy visibility in the pg_columnmask.ddm_policies view for administrators.
- Fixed a crash condition when using pg_buffercache extension during Serverless v2 scaling.

PostgreSQL 16.10

This release of Aurora PostgreSQL is compatible with PostgreSQL 16.10. For more information about the improvements in PostgreSQL 16.10, see PostgreSQL release 16.10.

Releases and patches

- Aurora PostgreSQL 16.10.5, July 20, 2026
- Aurora PostgreSQL 16.10.4, June 12, 2026

- Aurora PostgreSQL 16.10.2, April 22, 2026
- Aurora PostgreSQL 16.10.1, November 25, 2025
- Aurora PostgreSQL 16.10, November 25, 2025

Aurora PostgreSQL 16.10.5, July 20, 2026

Critical stability enhancements

- Fixed an issue in Babelfish where table-valued parameters would store only the last row N times, where N is the total number of rows provided.
- Fixed an issue that improves B-tree prefetch performance when index scans were not properly utilizing prefetch buffers.

General enhancements

- Fixed an issue where GRANT SET ON PARAMETER incorrectly allowed permissions to be granted for non-existent extension parameters.

Aurora PostgreSQL 16.10.4, June 12, 2026

High priority enhancements

- Fixed an issue with suboptimal B-tree prefetch causing increased I/O wait times.
- Back-ported fixes for the following PostgreSQL community security issues:
  - CVE-2026-6472
  - CVE-2026-6473
  - CVE-2026-6474
  - CVE-2026-6475
  - CVE-2026-6476
  - CVE-2026-6477
  - CVE-2026-6478
  - CVE-2026-6479
  - CVE-2026-6575
  - CVE-2026-6637

- CVE-2026-6638

Aurora PostgreSQL 16.10.2, April 22, 2026

Critical stability enhancements

- Fixed a bug in the aws_s3 extension which, in rare circumstances, can cause database unavailability.
- Fixed an issue where read nodes may restart when attempting to connect to the new write node following a failover.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2026-2003.
  - CVE-2026-2004.
  - CVE-2026-2005.
  - CVE-2026-2006.
  - CVE-2026-2007.
  - CVE-2026-3172.
- Fixed a bug in Query Plan Management that prevented plan capture.
- Fixed a bug in the Aurora Storage Daemon that could cause database unavailability in rare cases when enhanced logical replication is enabled.
- Fixed an issue that can result in reader unavailability during catching up with the writer instance
- Fixed an issue where file handlers could remain improperly allocated after a major version upgrade.
- Fixed an issue where databases could run out of memory due to excessive storage metadata in rare circumstances.
- Fixed an issue in cache initialization that could cause database unavailability during startup.
- Fixed an issue where global databases planned switchover operations could become unresponsive while waiting for storage volume growth to complete.

General enhancements

- Fixed an issue where ANALYZE operations did not work correctly on tables containing large LOB data
- Fixed an issue to reduce CPU overhead while establishing Encryption in Transit between the database engine and the storage layer.
- Fixed improper handling of empty response during connection loss with storage nodes
- Fixed an issue where correlated any transform could return an error message 'failed to build any 3-way joins' during transformation.
- Fixed an issue where optimization was not triggered due to incorrect tracking of transaction metadata.
- Fixed an issue where ALTER FUNCTION could fail with "routine name is not unique".

Aurora PostgreSQL 16.10.1, November 25, 2025

Critical stability enhancements

- Fixed a database shutdown issue which could cause major version upgrade to fail.
- Fixed an Issue that could cause readers to restart or readers cannot perform read operations due to missing storage segments

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-12817
  - CVE-2025-12818
- Fixed an issue with the cleanup of files created by NOTIFY channels, which could lead to high local storage usage.

General enhancements

- Fixed an issue that could cause delays in scaling down for Serverless V2 instances.
- Fixed IMDS throttling issues by reducing IMDS requests for region related information.

Aurora PostgreSQL 16.10, November 25, 2025

New features

- Introduced Dynamic Data Masking (DDM), a database-level security feature that protects sensitive data by masking column values before they are presented to database clients, without modifying the actual stored data. DDM enables organizations to control access to Personally Identifiable Information (PII) and other sensitive data through role-based masking policies that are applied dynamically at query execution time. For more details visit Dynamic Data Masking.
- Introduced Shared Plan Cache to reduce memory usage by sharing query plans between backend processes.
- Added support for correlated subquery cache for EXISTS, NOT EXISTS, and row comparison subqueries.
- Introduced a new feature to significantly reduce database downtime during restarts by initializing Aurora storage metadata in parallel and reducing contention during initialization.
- Added new pg_columnmask extension

Critical stability enhancements

- Fixed an issue related to Optimized Reads-enabled tiered cache functionality that might result in longer recovery times after a failover to Aurora replica instances.
- Fixed an issue where clusters with enhanced logical replication (aurora.enhanced_logical_replication) enabled could experience instance restarts when decoding DDL-heavy workloads.
- Fixed an issue where clusters with enhanced logical replication (aurora.enhanced_logical_replication) enabled could experience instance restarts due to improper handling of aborted transaction metadata during database startup.

High priority enhancements

- Back-ported fixes for the following PostgreSQL community security issues:
  - CVE-2025-8713
  - CVE-2025-8714
  - CVE-2025-8715
- Fixed an issue in logical replication where subscriber databases could skip replicating transactions after recovering from a crash.
- Fixed an issue which could prevent logical replication from resuming after upgrade.

- Fixed an issue which can cause vacuum operations to become blocked after the restart of an Aurora replica in a Global Database.
- Fixed a security issue when altering routine ownership.
- Fixed an issue causing query execution failure for execution plans using the "bitmap heap scan" access method.
- Fixed an issue impacting query execution performance for execution plans using the "bitmap heap scan" access method.

General enhancements

- Updated the following extensions:
  - oracle_fdw to version to 2.8.0
  - pg_repack extension to version 1.5.2
  - aws_lamba extension to version 2.0
- Improvements to the replay performance of the Aurora WAL replay process on read replica instances.
- Improved file metadata initialization times.
- Fixed an issue that caused reader instance to restart when attempting to create PostgreSQL SLRU files.
- Fixed an issue which caused prolonged Serverless v2 scaling time.
- Fixed an issue that could cause database restart during Serverless v2 scaling.
- Fixed a performance issue on 48xlarge graviton instances.
- Fixed a timing issue in replication diagnostics that could prevent accurate reporting of Aurora replica recovery status when state transitions occur in rapid succession.
- Updated the aws_lambda extension to version 2.0, which resolves a performance issue that was present in version 1.0.
- Added support to include Geodetic TIFF grid files for PROJ.
- Fixed an issue that could cause database restart during aws_s3 export.
- Addressed an issue with logging when replication slots are invalidated.
- Fixed CVE-2023-3079 for V8 Engine in the PLV8 extension.
- Fixed an issue with parallel heap scans that could lead to index inconsistency on tables larger than 16TiB when synchronize_seqscans is enabled.

- Fixed an issue where read queries may time out on Aurora replica nodes during the replay of lazy truncation triggered by vacuum on the writer node.
- Fixed a crash that occurred when using ST_AsGeoJSON after upgrading to a release containing PostGIS 3.5.1 without running postgis_extensions_upgrade.
- Fixed an issue which prevented online recovery of an Aurora Replica forcing offline recovery.

PostgreSQL 16.9

This release of Aurora PostgreSQL is compatible with PostgreSQL 16.9. For more information about the improvements in PostgreSQL 16.9, see PostgreSQL release 16.9.

Releases and patches

- Aurora PostgreSQL 16.9.6, July 29, 2026
- Aurora PostgreSQL 16.9.5, June 12, 2026
- Aurora PostgreSQL 16.9.4, January 15, 2026
- Aurora PostgreSQL 16.9.3, September 16, 2025
- Aurora PostgreSQL 16.9.2, August 8, 2025
- Aurora PostgreSQL 16.9.1, June 30, 2025
- Aurora PostgreSQL 16.9, June 30, 2025

Aurora PostgreSQL 16.9.6, July 29, 2026

Critical stability enhancements

- Fixed an issue in Babelfish where table-valued parameters would store only the last row N times, where N is the total number of rows provided.
- Fixed an issue that improves B-tree prefetch performance when index scans were not properly utilizing prefetch buffers.

General enhancements

- Fixed an issue where GRANT SET ON PARAMETER incorrectly allowed permissions to be granted for non-existent extension parameters.

Aurora PostgreSQL 16.9.5, June 12, 2026

Critical stability enhancements

- Fixed a bug in the aws_s3 extension which, in rare circumstances, can cause database unavailability.
- Fixed an issue where read nodes may restart when attempting to connect to the new write node following a failover.

High priority enhancements

- Fixed an issue with suboptimal B-tree prefetch causing increased I/O wait times.
- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2026-2003.
  - CVE-2026-2004.
  - CVE-2026-2005.
  - CVE-2026-2006.
  - CVE-2026-2007.
  - CVE-2026-3172.
  - CVE-2026-6472
  - CVE-2026-6473
  - CVE-2026-6474
  - CVE-2026-6475
  - CVE-2026-6476
  - CVE-2026-6477
  - CVE-2026-6478
  - CVE-2026-6479
  - CVE-2026-6575
  - CVE-2026-6637
  - CVE-2026-6638
- Fixed a bug in Query Plan Management that prevented plan capture.
- Fixed a bug in the Aurora Storage Daemon that could cause database unavailability in rare cases when enhanced logical replication is enabled.

- Fixed an issue that can result in reader crash during catching up with the writer instance.
- Fixed an issue in cache initialization that could cause database unavailability during startup.
- Fixed an issue where global databases planned switchover operations could become unresponsive while waiting for storage volume growth to complete.

Security enhancements

- Fixed a bug in the babelfish_set_role function that improved permission validation when setting roles.

General enhancements

- Fixed an issue to reduce CPU overhead while establishing Encryption in Transit between the database engine and the storage layer.
- Fixed improper handling of empty response during connection loss with storage nodes.
- Fixed an issue where correlated any transform could return an error message 'failed to build any 3-way joins' during transformation.
- Fixed an issue where ALTER FUNCTION could fail with "routine name is not unique".

Aurora PostgreSQL 16.9.4, January 15, 2026

Critical stability enhancements

- Fix an issue which could trigger a race in change data capture (CDC) volume expansion.
- Process cleanup improvements during zero downtime patching to ensure that all database processes are properly terminated, preventing shutdown stalls and improving zero downtime patching success.
- Fixed a database shutdown issue which could cause major version upgrade to fail.
- Fixed an Issue that could cause readers to restart or readers cannot perform read operations due to missing storage segments.

High priority enhancements

- Fixed an issue which could cause a restart during the start of logical replication data synchronization.

- Fixed an issue with the cleanup of files created by NOTIFY channels, which could lead to high local storage usage.
- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-12817.

    CVE-2025-12818.

General enhancements

- Fixed an issue that could cause delays in scaling down for Serverless V2 instances.
- Fixed IMDS throttling issues by reducing IMDS requests for region related information.

Aurora PostgreSQL 16.9.3, September 16, 2025

Critical stability enhancements

- Fixed an issue in engine minor and patch upgrades where in rare cases a backend can incorrectly process an interrupt early.
- Fixed an issue where minor version upgrades and patch upgrades might take a few seconds longer because the runtime process wasn't exiting gracefully.
- Fixed an issue related to Optimized Reads-enabled tiered cache functionality that might result in longer recovery times after a failover to Aurora replica instances.
- Fixed a security issue when altering routine ownership.
- Fixed an issue with Serverless v2 scaling that may cause unavailability when fetching pages from storage.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-8713.
  - CVE-2025-8714.
  - CVE-2025-8715.
- Backported fixes for the following PLv8 extension's V8 Engine security vulnerabilities.
  - CVE-2022-1364.

  - CVE-2023-3079.
- Fixed an issue that can cause reboots of the primary db instance when reading from a logical replication slot in the presence of frequent DDL if aurora.enhanced_logical_replication is enabled.
- Fixed a race where old writer may not step down after a new writer is promoted and continues to write.

General enhancements

- Fixed an issue that could in certain cases prevent online recovery of an Aurora Replica from completing.
- Fixed an issue that could cause unavailability when `apg_plan_mgmt` is enabled.
- Fixed an issue with parallel heap scans that could lead to index inconsistency on tables larger than 16TiB when synchronize_seqscans is enabled.
- Fixed an issue in Query Plan Management with running a utility statement immediately after installing the extension or resetting shared memory.
- Fixed an issue with Babelfish ZDP that could lead to instance reboot after minor version ugprade in some cases.
- Fixed an issue in enforcing, validating and evolving the `plans` extension in Query Plan Management.
- Fixed an issue during numeric calculations involving aggregate functions with all-column selections.
- Fixed an issue with prolonged Serverless v2 scaling time.
- Fixed a crash that occurred when using ST_AsGeoJSON after upgrading to a release containing The `PostGIS` extension 3.5.1 without running postgis_extensions_upgrade.
- Fixed an issue causing a replica restart during the replica join case.
- Fixed an issue which can cause vacuum operations to become blocked after the restart of an Aurora replica in a Global Database.
- Fixed and issue where storage client may crash during instance restart.

Aurora PostgreSQL 16.9.2, August 8, 2025

Critical stability enhancements

- Fixed an issue which could prevent logical replication from resuming after upgrade.
- Fixed an issue with Serverless v2 scaling that may cause unavailability when performing reads from Aurora Storage.

Aurora PostgreSQL 16.9.1, June 30, 2025

High priority enhancements

- Fixed a performance issue affecting instance restart operations.

Aurora PostgreSQL 16.9, June 30, 2025

New features

- Improved Serverless v2 scaling for storage bound workloads.
- Improved Serverless v2 scaling through optimized management of memory maps.
- Aurora has doubled its maximum storage capacity from 128 TiB to 256 TiB. This increased storage limit allows customers to manage larger workloads in a single DB cluster. To access the increased storage limit for Aurora PostgreSQL, upgrade your DB cluster to version 17.5, 16.9, 15.13, or higher. Once upgraded, Aurora storage will automatically scale up to 256 TiB capacity based on the amount of data in the cluster volume.

Critical stability enhancements

- Fixed an issue where Serverless instances would fail to perform Zero Downtime Patching after automatic resume.
- Added library dependency verification during minor and patch upgrades to ensure storage metadata recovery is safe before proceeding.

High priority enhancements

- Fixed an issue in the `rds_activity_stream extension` that could cause brief periods of unavailability during configuration reloads.
- Fixed an issue where server will fail to start if a previous startup was prematurely terminated.

General enhancements

- Updated the following extensions:
  - apg_plan_mgmt to 2.9.
  - The `pgaudit` extension to 16.1.
  - The `rdkit` extension to 4.6.1 (2024_09_6).
  - The `pg_repack` extension to 1.5.1.
  - The `pglogical` extension to 2.4.5.
- Improvements to make Serverless v2 scaling more efficient on reader nodes.
- Fixed an issue related to the interactions between out-of-row storage and aborted sub-transactions that could cause issues in logical streaming when aurora.enhanced_logical_replication is enabled.
- Fixed an issue that prevents Zero Downtime Patching from completing successfully on Serverless v2 auto-pause enabled instances.
- Fixed an issue in pgdam that causes the engine (with pgdam enabled) to crash when hitting maximum connections.
- Fixed an issue in the `pg_bigm` extension that can cause unavailability when the extension interacts with the GIN index.
- In Blue/Green deployments, creating or modifying temporary objects is no longer classified as restricted DDL.
- Added validation to ensure only predefined GUCs with `aurora_stat_plans` the `prefix` extension are accepted on SET or SHOW commands.
- Added function aurora_stat_resource_usage() to report current CPU usage, allocated and used memory for all the backends.
- Fixed an issue which prevented Zero Downtime Patching when cache recovery is disabled.
- Fixed a synchronization issue where Zero Downtime Patching could fail due to premature engine ready state reporting.
- Fixed an issue in checkpoint replication to have storage metadata position be consistent in reader.
- Fixed an issue which causes RO node to restart while its reconnecting to RW node.
- Fixed an issue which causes instability to Zero-ETL integrations due to stale caches in the presence of frequent ALTER TABLE commands.
- Fixed an issue where RO client process can be stuck in LWLock:BufferIO wait event after being disconnected from the writer.

- Fixed an issue where RO node could crash when frequently falling behind RW node.
- Fixed an issue in the aws_s3 extension that could cause an import operation to restart and reinsert previously inserted rows.
- Improved performance of EXPLAIN operations for queries involving tables with many columns and complex relations.
- Added separate GUC `apg_enable_correlated_scalar_index_transform` (OFF by default) to control whether to transform the correlated subquery when the correlated column in the inner table is a leading column of any index.

PostgreSQL 16.8

This release of Aurora PostgreSQL is compatible with PostgreSQL 16.8. For more information about the improvements in PostgreSQL 16.8, see PostgreSQL release 16.8.

Releases and patches

- Aurora PostgreSQL 16.8.8, August 05, 2026
- Aurora PostgreSQL 16.8.7, June 26, 2026
- Aurora PostgreSQL 16.8.6, May 07, 2026
- Aurora PostgreSQL 16.8.5, February 03, 2026
- Aurora PostgreSQL 16.8.4, October 9, 2025
- Aurora PostgreSQL 16.8.3, June 03, 2025
- Aurora PostgreSQL 16.8.2, May 01, 2025
- Aurora PostgreSQL 16.8, April 07, 2025

Aurora PostgreSQL 16.8.8, August 05, 2026

Critical stability enhancements

- Fixed an issue in Babelfish where table-valued parameters would store only the last row N times, where N is the total number of rows provided.
- Fixed an issue that improves B-tree prefetch performance when index scans were not properly utilizing prefetch buffers.

General enhancements

- Fixed an issue where GRANT SET ON PARAMETER incorrectly allowed permissions to be granted for non-existent extension parameters.
- Fixed a performance issue with REINDEX operations on certain variable-size data types.

Aurora PostgreSQL 16.8.7, June 26, 2026

High priority enhancements

- Fixed an issue with suboptimal B-tree prefetch causing increased I/O wait times.
- Back-ported fixes for the following PostgreSQL community security issues:
  - CVE-2026-6472
  - CVE-2026-6473
  - CVE-2026-6474
  - CVE-2026-6475
  - CVE-2026-6476
  - CVE-2026-6477
  - CVE-2026-6478
  - CVE-2026-6479
  - CVE-2026-6575
  - CVE-2026-6637
  - CVE-2026-6638

Aurora PostgreSQL 16.8.6, May 07, 2026

Critical stability enhancements

- Fixed a bug in the aws_s3 extension which, in rare circumstances, can cause database unavailability.
- Fixed an issue where read nodes may restart when attempting to connect to the new write node following a failover.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:

- CVE-2026-2003.
- CVE-2026-2004.
- CVE-2026-2005.
- CVE-2026-2006.
- CVE-2026-2007.
- CVE-2026-3172.
- Fixed a bug in Query Plan Management that prevented plan capture.
- Fixed a bug in the Aurora Storage Daemon that could cause database unavailability in rare cases when enhanced logical replication is enabled.
- Fixed an issue that can result in reader unavailability during catching up with the writer instance
- Fixed an issue in cache initialization that could cause database unavailability during startup.
- Fixed an issue where global databases planned switchover operations could become unresponsive while waiting for storage volume growth to complete.

General enhancements

- Fixed an issue to reduce CPU overhead while establishing Encryption in Transit between the database engine and the storage layer.
- Fixed an issue where correlated any transform could return an error message 'failed to build any 3-way joins' during transformation.
- Fixed an issue where ALTER FUNCTION could fail with "routine name is not unique".

Aurora PostgreSQL 16.8.5, February 03, 2026

Critical stability enhancements

- Fixed an issue that could cause garbage collection to get blocked on a change data capture (CDC) volume.
- Fix an issue which could trigger a race in change data capture (CDC) volume expansion.
- Process cleanup improvements during zero downtime patching to ensure that all database processes are properly terminated, preventing shutdown stalls and improving zero downtime patching success.
- Fixed a database shutdown issue which could cause major version upgrade to fail.

- Fixed an Issue that could cause readers to restart or readers cannot perform read operations due to missing storage segments.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-12817.
  - CVE-2025-12818.
- Fixed an issue which could cause a restart during the start of logical replication data synchronization.
- Fixed an issue where premature status updates during zero downtime patching could cause unnecessary failures by ensuring proper synchronization with server startup.
- Fixed an issue with the cleanup of files created by NOTIFY channels, which could lead to high local storage usage.

General enhancements

- Fixed IMDS throttling issues by reducing IMDS requests for region related information.

Aurora PostgreSQL 16.8.4, October 9, 2025

Critical stability enhancements

- Fixed an issue in engine minor and patch upgrades where in rare cases a backend can incorrectly process an interrupt early.
- Fixed an issue where minor version upgrades and patch upgrades might take a few seconds longer because the runtime process wasn't exiting gracefully.
- Fixed an issue related to Optimized Reads-enabled tiered cache functionality that might result in longer recovery times after a failover to Aurora replica instances.
- Fixed a security issue when altering routine ownership.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-8713.

  - CVE-2025-8714.
  - CVE-2025-8715.
- Backported fixes for the following PLv8 extension's V8 Engine security vulnerabilities:
  - CVE-2022-1364.
  - CVE-2023-3079.
- Fixed a race condition where old writer instance may not step down after a new writer instance is promoted and continues to write.

General enhancements

- Fixed an issue that could prevent online recovery of an Aurora Replica from completing.
- Fixed an issue that could cause unavailability when `apg_plan_mgmt` is enabled.
- Fixed an issue with parallel heap scans that could lead to index inconsistency on tables larger than 16TiB when synchronize_seqscans is enabled.
- Fixed an issue in Query Plan Management with running a utility statement immediately after installing the extension or resetting shared memory.
- Fixed an issue in enforcing, validating and evolving the `plans` extension in Query Plan Management.
- Fixed an issue during numeric calculations involving aggregate functions with all-column selections.
- Fixed an issue that could cause prolonged Serverless v2 scaling time.
- Fixed a crash that occurred when using ST_AsGeoJSON after upgrading to a release containing The `PostGIS` extension 3.5.1 without running postgis_extensions_upgrade.
- Fixed an issue causing a replica restart during the replica join case.
- Fixed an issue which can cause vacuum operations to become blocked after the restart of an Aurora replica in a Global Database.
- Fixed an issue causing query execution failure for execution the `plans` extension using the "bitmap heap scan" access method.
- Fixed an issue impacting query execution performance for execution the `plans` extension using the "bitmap heap scan" access method.
- Fixed and issue where storage client may crash during instance restart.

Aurora PostgreSQL 16.8.3, June 03, 2025

Critical stability enhancements

- Fixed stuck scaling for serverless db instances with Zero-ETL enabled.
- Fixed an issue which can cause the database to become unresponsive when performing actions with Aurora Storage.
- Fixed an issue related to the interaction between Aurora Serverless scaling and the improved reader availability functionality that might result in longer recover times and impact availability.
- Fixed an issue in the `rds_activity_stream` extension that could cause brief periods of unavailability during configuration reloads and when maximum connections are consumed.
- Fixed an issue in handling parameter lists from previous versions of query plan management.

General enhancements

- Fixed an issue in handling of asynchronous I/O cancellation that could cause processes to become stuck indefinitely.
- Fixed an issue related to the interactions between out-of-row storage and aborted subtransactions that could cause issues in logical streaming when aurora.enhanced_logical_replication is enabled.
- Fixed an issue where unexpected internal communication channel re-establishments may cause increased latency on data processing.
- Added support of newly released Regions for the aws_s3 extension.
- Fixed an issue that can cause process stuck indefinitely at LWLock:BufferIO wait event.
- Fixed an issue that can cause RO instance crash under heavy workload.
- Fixed an issue that causes minor version upgrades to fail with sleep/wake feature.

Aurora PostgreSQL 16.8.2, May 01, 2025

Critical priority enhancements

- Fixed stuck scaling for serverless db instances with ZeroETL enabled.
- Fixed an issue which can cause the database to become unresponsive when performing actions with Aurora storage.

Aurora PostgreSQL 16.8, April 07, 2025

New features

- Aurora Optimized Reads now enables users to resize the allocated space for Optimized Reads-enabled temporary objects on Aurora I/O-Optimized clusters using a dynamic parameter “aurora_temp_space_size”. For more information, see Aurora Optimized Reads.
- Added support for transforming correlated subquery into derived table to improve execution efficiency. For more information, see Improving Aurora PostgreSQL query performance using subquery transformation .
- Added support for caching the result of correlated subquery to improve execution efficiency. For more information, see Using subquery cache to improve Aurora PostgreSQL query performance.

Critical stability enhancements

- Improved private memory allocation instrumentation to reduce CPU overhead for compute-heavy workloads that frequently invoke aset and slab allocation calls with `palloc`.
- When the system is under critical memory pressure for an extended duration, the largest customer backend will be cancelled to prevent system from restarting due to out of memory.

High priority enhancements

- Fixed an issue where Aurora in-Region failovers would result in failures in database startup.
- Fixed a security issue in the `rds_activity_stream` extension.
- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-1094.

General enhancements.

- Aurora storage metadata now initializes more quickly during unplanned failovers and server restarts, reducing overall downtime. Larger instances benefit the most by leveraging higher parallelism.
- Improved performance of file metadata operations.
- Made improvements to database downtime during a `planned` extension switchover for Global Databases.

- In Blue/Green deployments, creating or modifying temporary objects is no longer classified as restricted DDL.
  - Creating temporary objects with syntax such as CREATE TEMPORARY TABLE x AS SELECT * FROM isn't supported.
  - Creating indexes on temporary tables isn't supported.
- The Blue/Green deployment switchover won't be blocked by the `REFRESH MATERIALIZED VIEW` statement.
- Improved allocation of Write-Ahead Log (WAL) stream numbers, resulting in increased throughput for write-heavy workloads on the new Graviton 4 high-end instances.
- Fixed an issue where the query identifier (queryid) wasn't being correctly updated in pg_stat_activity when using extended protocol in pipeline mode.
- Fixed an issue in handling of asynchronous I/O cancellation that could cause processes to become stuck indefinitely.
- Updated the following extensions:
  - Update the `pgvector` extension to 0.8.0.
  - Update the `pg_cron` extension to v1.6.5.
  - Update the `tds_fdw` extension to 2.0.4.
  - Update the `postgis` extension to 3.5.1.
  - Update the `pg_partman` extension to v5.2.4.
  - Update the `orafce` extension to 4.14.0.
  - Update the `rds_tools` extension to 1.9.
  - Update the `rdkit` extension to Release_2024_09_3.

PostgreSQL 16.6 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 16.6. For more information about the improvements in PostgreSQL 16.6, see PostgreSQL release 16.6.

Releases and patches

- Aurora PostgreSQL 16.6.7, January 28, 2026
- Aurora PostgreSQL 16.6.6, November 13, 2025
- Aurora PostgreSQL 16.6.5, June 24, 2025
- Aurora PostgreSQL 16.6.4, March 24, 2025

- Aurora PostgreSQL 16.6.3, February 13, 2025
- Aurora PostgreSQL 16.6.2, January 20, 2025
- Aurora PostgreSQL 16.6.1, December 27, 2024
- Aurora PostgreSQL 16.6, December 27, 2024

Aurora PostgreSQL 16.6.7, January 28, 2026

Critical stability enhancements

- Fixed an issue that could cause garbage collection to get blocked on a change data capture (CDC) volume.
- Fix an issue which could trigger a race in change data capture (CDC) volume expansion.
- Process cleanup improvements during zero downtime patching to ensure that all database processes are properly terminated, preventing shutdown stalls and improving zero downtime patching success.
- Fixed an Issue that could cause readers to restart or readers cannot perform read operations due to missing storage segments.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-12817.
  - CVE-2025-12818.
- Fixed an issue where premature status updates during zero downtime patching could cause unnecessary failures by ensuring proper synchronization with server startup.

General enhancements

- Fixed IMDS throttling issues by reducing IMDS requests for region related information.

Aurora PostgreSQL 16.6.6, November 13, 2025

Critical stability enhancements

- Fixed an issue in engine minor and patch upgrades where in rare cases a backend can incorrectly process an interrupt early.
- Fixed an issue where minor version upgrades and patch upgrades might take a few seconds longer because the runtime process was not exiting gracefully.
- Fixed an issue related to Optimized Reads-enabled tiered cache functionality that might result in longer recovery times after a failover to Aurora replica instances.
- Fixed a security issue when altering routine ownership.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-8713.
  - CVE-2025-8714.
  - CVE-2025-8715.
- Backported fixes for the following PLv8 extension's V8 Engine security vulnerabilities:
  - CVE-2022-1364.
  - CVE-2023-3079.
- Fixed a race condition where old writer instance may not step down after a new writer instance is promoted and continues to write.

General enhancements

- Fixed an issue that could prevent online recovery of an Aurora Replica from completing.
- Fixed an issue that could cause unavailability when apg_plan_mgmt is enabled.
- Fixed an issue with parallel heap scans that could lead to index inconsistency on tables larger than 16TiB when synchronize_seqscans is enabled.
- Fixed an issue in Query Plan Management with running a utility statement immediately after installing the extension or resetting shared memory.
- Fixed an issue in enforcing, validating and evolving plans in Query Plan Management.
- Fixed an issue that could cause prolonged Serverless v2 scaling time.
- Fixed a crash that occurred when using ST_AsGeoJSON after upgrading to a release containing PostGIS 3.5.1 without running postgis_extensions_upgrade.
- Fixed an issue causing a replica restart during the replica join case.

- Fixed an issue which can cause vacuum operations to become blocked after the restart of an Aurora replica in a Global Database.
- Fixed an issue causing query execution failure for execution plans using the "bitmap heap scan" access method.
- Fixed an issue impacting query execution performance for execution plans using the "bitmap heap scan" access method.

Aurora PostgreSQL 16.6.5, June 24, 2025

Critical stability enhancements

- Fixed an issue related to the interaction between Aurora Serverless scaling and the improved reader availability functionality that might result in longer recover times and impact availability.
- Fixed an issue in the rds_activity_stream extension that could cause brief periods of unavailability during configuration reloads and when maximum connections are consumed.

General enhancements.

- Fixed an issue in handling of asynchronous I/O cancellation that could cause processes to become stuck indefinitely.
- Fixed an issue that causes minor version upgrades to fail with sleep/wake feature.
- Fixed an issue related to the interactions between out-of-row storage and aborted subtransactions that could cause issues in logical streaming when `aurora.enhanced_logical_replication` is enabled.
- Fixed an issue that can cause process stuck indefinitely at LWLock:BufferIO wait event.
- Added support of newly released Regions for the aws_s3 extension.
- Fixed an issue where unexpected internal communication channel re-establishments may cause increased latency on data processing.

Aurora PostgreSQL 16.6.4, March 24, 2025

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-1094.

General enhancements

- Fixed an issue on the replica where a network interruption may not correctly re-establish connection with the writer.

Aurora PostgreSQL 16.6.3, February 13, 2025

High priority enhancements

- Fixed CVE-2020-6418 for V8 Engine in the PLV8 extension.

Aurora PostgreSQL 16.6.2, January 20, 2025

Critical Priority enhancements

- Fixed a security issue in the `rds_activity_stream` extension.

High priority enhancements

- Fixed an issue in Global DB switchover and failover that could result in customers needing to rebuild their mirror clusters.
- Fixed an issue where transactional commands may terminate the connection in some cases.

General enhancements

- Fixed an ownership issue where the `postgis_raster` extension could not be updated correctly from a previous the `PostGIS` extension v2 installation.

Aurora PostgreSQL 16.6.1, December 27, 2024

Critical Priority enhancements

- Fixed an issue where the server was restarting when the connections were reset by the peer.

Aurora PostgreSQL 16.6, December 27, 2024

New features

- Improved Aurora Global Database cross-Region resilience. This ensures secondary region read availability during unexpected issues like hardware failures, network disruption across regions, and others. For more information, see Cross-Region resiliency for Global Database secondary clusters.
- Optimized the minor version and patch upgrade process to reduce downtime for read replicas.
- Performance enhancements that improve write throughput for 32xl and larger instances running on I/O-Optimized configuration.

Critical stability enhancements

- Fixed an issue that in rare cases can cause CPU usage spike.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2024-10979
  - CVE-2024-10978
  - CVE-2024-10977
  - CVE-2024-10976
- Fixed an issue related to logical replication when processing large aborted transactions in the presence of catalog modifying operations. This can result in a transient failure of the logical replication process.

General enhancements

- Improved handling of read replica lag, leading to higher write throughput on larger instances during peak usage.
- Made multiple improvements to Aurora in-Region failover which reduces database downtime further by improving storage metadata and faster buffer cache initialization.
- Made multiple improvements to upgrades with Zero-Downtime Patching (ZDP) which reduces connection restore time and enhances ZDP resilience from failures.

- Fixed an issue where the server_id value wasn't updated after an Amazon RDS Blue/Green Deployment switchover.
- Fixed an issue that could cause database restart during hash index extension.
- Fixed an issue that would cause migration from RDS PostgreSQL to fail in the presence of nested tablespaces.
- Fixed an issue that would cause excessive engine startup times in the presence of a large number of logical replication files.
- Fixed an issue related to zero-ETL where altering the constraint of a table in a new database session may cause the command to fail.
- Fixed an issue that could cause a database restart when calling functions from `aws_s3`, `aws_lambda`, and `aws_ml` extensions in the same database session as `aws_s3.table_import_from_s3()`. This fix may decrease the per-call performance of functions from the `aws_s3`, `aws_lambda`, and `aws_ml` extensions.
- Fixed an issue that could cause database restart during serverless scaling.
- Fixed an issue where AuroraForwardingReplicaReadWaitLatency and AuroraForwardingReplicaDMLLatency were reported incorrectly.
- Fixed an issue that prevented updating the pgTAP extension to version 1.3.0 or later.
- Fixed an issue in the `PostGIS` extension, which in rare cases, could cause a DB instance restart.
- Added generic `plan` informations in `aurora_stat_statements/aurora_stat_plans`.
- Fixed an issue in the `pg_repack` extension that compromises the integrity of invalid indexes.

Additional improvements and enhancements

- Updated the following extensions:
  - `pg_cron` extension to v1.6.4.
  - `PostGIS` extension to version 3.4.3.
  - `PROJ` library extension to version 9.5.0.
  - `GEOS` library extension to verison 3.13.0.
  - `orafce` extension to 4.12.0.
  - `pgvector` extension to 0.7.4.
  - `RDKit` extension to 2024_03_6 release (4.6).
  - `pg_hint_plan` extension to version 1.6.1.

PostgreSQL 16.4 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 16.4. For more information about the improvements in PostgreSQL 16.4, see PostgreSQL release 16.4.

Releases and patches

- Aurora PostgreSQL 16.4.7, February 13, 2026
- Aurora PostgreSQL 16.4.6, November 21, 2025
- Aurora PostgreSQL 16.4.5, July 11, 2025
- Aurora PostgreSQL 16.4.4, April 17, 2025
- Aurora PostgreSQL 16.4.2, January 29, 2025
- Aurora PostgreSQL 16.4.1, January 02, 2025
- Aurora PostgreSQL 16.4, September 30, 2024

Aurora PostgreSQL 16.4.7, February 13, 2026

Critical stability enhancements

- Fixed an issue that could cause garbage collection to get blocked on a change data capture (CDC) volume.
- Fix an issue which could trigger a race in change data capture (CDC) volume expansion.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-12817.
  - CVE-2025-12818.

Aurora PostgreSQL 16.4.6, November 21, 2025

Critical stability enhancements

- Fixed an issue where minor version upgrades and patch upgrades might take a few seconds longer because the runtime process was not exiting gracefully.

- Fixed an issue related to Optimized Reads-enabled tiered cache functionality that might result in longer recovery times after a failover to Aurora replica instances.
- Fixed a security issue when altering routine ownership.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-8713.
  - CVE-2025-8714.
  - CVE-2025-8715.
- Backported fixes for the following PLv8 extension's V8 Engine security vulnerabilities:
  - CVE-2022-1364.
  - CVE-2023-3079.
- Fixed a race condition where old writer instance may not step down after a new writer instance is promoted and continues to write.

General enhancements

- Fixed an issue that could prevent online recovery of an Aurora Replica from completing.
- Fixed an issue that could cause unavailability when apg_plan_mgmt is enabled.
- Fixed an issue with parallel heap scans that could lead to index inconsistency on tables larger than 16TiB when synchronize_seqscans is enabled.
- Fixed an issue in Query Plan Management with running a utility statement immediately after installing the extension or resetting shared memory.
- Fixed an issue in enforcing, validating and evolving plans in Query Plan Management.
- Fixed an issue that could cause prolonged Serverless v2 scaling time.
- Fixed a crash that occurred when using ST_AsGeoJSON after upgrading to a release containing PostGIS 3.5.1 without running postgis_extensions_upgrade.
- Fixed an issue causing a replica restart during the replica join case.
- Fixed an issue causing query execution failure for execution plans using the "bitmap heap scan" access method.
- Fixed an issue impacting query execution performance for execution plans using the "bitmap heap scan" access method.

Aurora PostgreSQL 16.4.5, July 11, 2025

Critical stability enhancements

- Fixed an issue related to the interaction between Aurora Serverless scaling and the improved reader availability functionality that might result in longer recover times and impact availability.
- Fixed an issue in the `rds_activity_stream` extension that could cause brief periods of unavailability during configuration reloads and when maximum connections are consumed.

General enhancements

- Fixed an issue in handling of asynchronous I/O cancellation that could cause processes to become stuck indefinitely.
- Fixed an issue that causes minor version upgrades to fail with sleep/wake feature.
- Fixed an issue related to the interactions between out-of-row storage and aborted subtransactions that could cause issues in logical streaming when `aurora.enhanced_logical_replication` is enabled.
- Fixed an issue that can cause process stuck indefinitely at LWLock:BufferIO wait event.
- Added support of newly released Regions for the `aws_s3` extension.
- Fixed an issue where unexpected internal communication channel re-establishments may cause increased latency on data processing.

Aurora PostgreSQL 16.4.4, April 17, 2025

High priority enhancements.

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-1094.

Aurora PostgreSQL 16.4.2, January 29, 2025

Critical stability enhancements.

- Fixed a security issue in the `rds_activity_stream` extension.

High priority enhancements.

- Fixed an issue in Global DB switchover and failover that could result in customers needing to rebuild their mirror clusters.
- Fixed an issue where transactional commands may terminate the connection in some cases.

General enhancements.

- Fixed an ownership issue where the postgis_raster extension could not be updated correctly from a previous the `PostGIS` extension v2 installation.

Aurora PostgreSQL 16.4.1, January 02, 2025

Critical stability enhancements

- Fixed an issue related to Query Plan Management background worker.
- Fixed a security issue in the `rds_activity_stream` extension.

High priority enhancements

- Fixed issue where Aurora in-Region failovers would result in failures in database startup.
- Fixed an issue for date functions to allow them to take into account the local/session timezone setting.
- Fixed an issue that prevented the scaling of Aurora Serverless v2 Read Replicas when aurora.enhanced_logical_replication is enabled.
- Fixed an issue in Global DB switchover and failover that could result in customers needing to rebuild their mirror clusters.
- Fixed an issue where transactional commands may terminate the connection in some cases.
- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2024-10979.
  - CVE-2024-10978.
  - CVE-2024-10976.
  - CVE-2024-10977.

General enhancements

- Fixed an issue where minor version upgrades with ZDP would fail resulting in longer upgrade times.
- Made improvements to Aurora in-Region failover which reduces database downtime further with faster buffer cache initialization.
- Fixed an issue where reserved keyword “PRIMARY” caused syntax errors when used as a column name or alias in DML and DDL statements.
- Fixed an issue that could cause an error in the wal sender process when resuming logical replication.
- Fixed an ownership issue where the postgis_raster extension could not be updated correctly from a previous the `PostGIS` extension 2 installation.

Aurora PostgreSQL 16.4, September 30, 2024

New features

- Introduced a new fast failover feature to reduce database downtime during the `planned` extension failover events with fast storage metadata initialization and fast buffer cache recovery.
- Introduced an optimization to reduce Zero Downtime Patching (ZDP) quiet point duration to 1 second.

Critical stability enhancements

- Fixed a rare bug causing missing commit timestamps for subtransactions.

High priority enhancements

- Fixed issues where the replication of vacuum operations may cause a restart when handling conflicts with user queries.
- Fixed an issue where deleting a large range of keys from a BTree index could cause concurrent scans to crash.

General enhancements

- Enabled support for FIPS-validated cryptography, a fully owned AWS implementation. For more information, see AWS-LC is now FIPS 140-3 certified on AWS Security Blog.

- Improvements to database startup time during initialization and engine upgrades.
- Fixed an issue during ZDP which causes some connections to be terminated due to long transferring time. A new ZDP metric in `postgresql.log` called `ZD_SOCKET_TRANSFER_CONN_DROPPED` represents these dropped connections.
- Improved reader availability for Aurora Replicas when using system administration functions.
- Fixed an in-memory two-phase commit (2PC) metadata caching issue that caused out-of-memory error on Aurora read replicas replicating from RDS PostgreSQL source instances.
- Introduced a new function pgadmap_get_set_mapping_cmd() in the `pg_ad_mapping` extension to display commands required to recreate existing Active directory security group to Aurora PostgreSQL database role mappings.
- Fixed an issue in storage metadata initialization that can cause prolonged database startup time.
- Fixed an issue that will prevent reclaiming Aurora storage space during major version upgrade.
- Fixed an issue that prevents ZDP from completing successfully on Optimized Reads-enabled instances.

Additional improvements and enhancements

- Updated the following extensions:
  - `pgvector` extension to version 0.7.3.
  - `mysql_fdw` extension to version REL-2_9_2.
  - `orafce` extension to version 4.10.3.
  - `pgTAP` extension to version 1.3.3.
  - `pg_cron` extension to version 1.6.3.
  - `RDKit` extension to version 4.5 (Release 2024_03_5).
  - `wal2json` extension to version 2.6.
  - pg_ad_mapping extension to version 1.0.
  - HypoPG extension to version 1.4.1.

PostgreSQL 16.3 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 16.3. For more information about the improvements in PostgreSQL 16.3, see PostgreSQL release 16.3.

Releases and patches

- Aurora PostgreSQL 16.3.5, July 17, 2025
- Aurora PostgreSQL 16.3.4, March 25, 2025
- Aurora PostgreSQL 16.3.3, January 29, 2025
- Aurora PostgreSQL 16.3.2, January 23, 2025
- Aurora PostgreSQL 16.3.1, September 27, 2024
- Aurora PostgreSQL 16.3, August 8, 2024

Aurora PostgreSQL 16.3.5, July 17, 2025

Critical stability enhancements

- Fixed an issue related to the interaction between Aurora Serverless scaling and the improved reader availability functionality that might result in longer recover times and impact availability.
- Fixed an issue in the `rds_activity_stream` extension that could cause brief periods of unavailability during configuration reloads and when maximum connections are consumed.

General enhancements

- Fixed an issue in handling of asynchronous I/O cancellation that could cause processes to become stuck indefinitely.
- Fixed an issue that causes minor version upgrades to fail with sleep/wake feature.
- Fixed an issue that can cause process stuck indefinitely at `LWLock:BufferIO` wait event.
- Added support of newly released Regions for the `aws_s3` extension.
- Fixed an issue where unexpected internal communication channel re-establishments may cause increased latency on data processing.

Aurora PostgreSQL 16.3.4, March 25, 2025

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-1094.

Aurora PostgreSQL 16.3.3, January 29, 2025

High priority enhancements

- Fixed CVE-2020-6418 for V8 Engine in the PLV8 extension.

Aurora PostgreSQL 16.3.2, January 23, 2025

Critical stability enhancements

- Fixed an issue related to Query Plan Management background worker.

High priority enhancements

- Fixed an issue for date functions to allow them to take into account the local/session timezone setting.
- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2024-10979.
  - CVE-2024-10978.
  - CVE-2024-10976.
  - CVE-2024-10977.

General enhancements

- Fixed an issue where minor version upgrades with ZDP would fail resulting in longer upgrade times.
- Made improvements to Aurora in-Region failover which reduces database downtime further with faster buffer cache initialization.
- Fixed an issue that could cause an error in the wal sender process when resuming logical replication.

Aurora PostgreSQL 16.3.1, September 27, 2024

High priority enhancements

- Backported fixes for the following PostgreSQL community security issue:

- CVE-2024-7348

General enhancements

- Fixed an issue that would cause ZDP to fail on Aurora Optimized Reads Cache instances while upgrading into this version.

Aurora PostgreSQL 16.3, August 8, 2024

New features

- Aurora Serverless v2 now applies pending database parameter `max_connections` changes during upgrades. The Serverless V2 capacity changes result in pending `max_connections` changes. As many ZDP supported connections as allowed by `max_connections` will be preserved during upgrades.
- Introduced a feature to improve database start up time through faster buffer cache initialization during restarts and database upgrades.
- Minor version and patch upgrades may now complete faster in some cases.
- Reduced Aurora Serverless v2 scale up and scale down time in the presence of data intensive workloads or long running queries and busy or unresponsive connections.
- Added per-query memory usage information to `aurora_stat_statements` and `aurora_stat_plans`. For more information, see aurora_stat_statements.

Critical stability enhancements

- Fixed a pg_repack issue that would incorrectly allow two vacuum processes to operate concurrently on the same table.

High priority enhancements

- Fixed an issue which leads to cancellation of long-running queries on Global Database replica instances.

General enhancements

- Improved Aurora PostgreSQL performance for AI workloads using `pgvector`.

- Fixed cumulative statistics data reset after manual reboot.
- Improvements to the replay performance of the Aurora WAL replay process on read replica instances.
- Fixed issue where minor version upgrades with ZDP would fail in some cases resulting in longer upgrade times.
- Improved replay performance of vacuum operations on Aurora Replica instances.
- Fixed an issue which can cause logical replication to terminate when attempting to access relation metadata.
- Fixed a bug where JDBC connections may not be preserved during ZDP enabled upgrades.
- Improvement to reduce postgres private memory fragmentation.
- Fixed an issue that caused two-phase commit files to remain, preventing proper cleanup.
- Improved memory handling while processing two phase commit files.
- Fixed an issue resulting in degraded performance during query planning on Aurora replicas.
- Improved availability of Aurora read replicas.
- Fixed an issue where server might restart if background worker tries to spawn parallel workers.
- Fixed an issue where the instance may restart when logically applying changes from a remote server when under resource constraints.
- Fixed an issue with database-wide and statement-level blk_read_time metric.

Additional improvements and enhancements

- Updated the following extensions:
  - `orafce` extension to version 4.9.4.
  - `pg_cron` extension to version 1.6.2.
  - `pg_partman` extension to version 5.1.0.
  - `pg_repack` extension to version 1.5.0.
  - `pg_tle` to version 1.4.0.
  - `pg_vector` extension to version 0.7.0.
  - `pgrouting` extension to version 3.6.2.
  - `pgTap` extension to version 1.3.2.
  - `PostGIS` extension to version 3.4.2.

- `RDKit` extension to version 2024_03_1.

PostgreSQL 16.2 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 16.2. For more information about the improvements in PostgreSQL 16.2, see PostgreSQL release 16.2.

Releases and patches

- Aurora PostgreSQL 16.2.6, July 28, 2025
- Aurora PostgreSQL 16.2.5, April 16, 2025
- Aurora PostgreSQL 16.2.4, February 02, 2025
- Aurora PostgreSQL 16.2.3, October 7, 2024
- Aurora PostgreSQL 16.2.2, June 20, 2024
- Aurora PostgreSQL 16.2.1, April 29, 2024

Aurora PostgreSQL 16.2.6, July 28, 2025

Critical stability enhancements.

- Fixed an issue related to the interaction between Aurora Serverless scaling and the improved reader availability functionality that might result in longer recover times and impact availability.
- Fixed an issue in the `rds_activity_stream` extension that could cause brief periods of unavailability during configuration reloads and when maximum connections are consumed.

General enhancements.

- Fixed an issue in handling of asynchronous I/O cancellation that could cause processes to become stuck indefinitely.
- Fixed an issue in the read replica deletion which could result in a vacuum being held back and causing eventual unavailability of database.
- Fixed an issue that can cause process stuck indefinitely at LWLock:BufferIO wait event.
- Added support of newly released Regions for the `aws_s3` extension.
- Fixed an issue where unexpected internal communication channel re-establishments may cause increased latency on data processing.

Aurora PostgreSQL 16.2.5, April 16, 2025

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-1094.

Aurora PostgreSQL 16.2.4, February 02, 2025

Critical stability enhancements

- Fixed a security issue in the `rds_activity_stream` extension.

High priority enhancements

- Fixed an issue for date functions to allow them to take into account the local/session timezone setting.
- Fixed an issue in Global DB switchover and failover that can result in customers needing to rebuild their mirror clusters.
- Fixed an issue where transactional commands may terminate the connection in some cases.
- Fixed CVE-2020-6418 for V8 Engine in the PLV8 extension.
- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2024-10979
  - CVE-2024-10978
  - CVE-2024-10976
  - CVE-2024-10977
- **General enhancements**

  Fixed an ownership issue where the postgis_raster extension could not be updated correctly from a previous the `PostGIS` extension v2 installation.

Aurora PostgreSQL 16.2.3, October 7, 2024

General enhancements

- Fixed an issue that would cause ZDP to fail on Aurora Optimized Reads Cache instances while upgrading into this version.

High priority enhancements

- Fixed issues where the replication of vacuum operations may cause a restart when handling conflicts with user queries.
- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-7348

Aurora PostgreSQL 16.2.2, June 20, 2024

General enhancements

- Fixed multiple issues where minor version upgrades with ZDP would fail resulting in longer upgrade times.

High priority enhancements

- Fixed a crash with execution of pltsql user defined functions.
- Fixed an issue which led to cancellation of long-running queries on Global Database replica instances.

Critical stability enhancements

- Fixed an issue where a change in memory requirements during a minor version upgrade can cause zero-downtime patching and engine startup to fail.
- Fixed an issue with background worker where it may crash when executed in parallel worker context.
- Fixed a pg_repack issue causing two vacuums to concurrently process the same table.
- Fixed issues in how two-phase commit files are handled.

Aurora PostgreSQL 16.2.1, April 29, 2024

New features

- Added resource usage summary to pg_dump.
- Added function overloading for `aurora_stat_statements(bool showtext)` and `aurora_stat_plans(bool showtext)`.

General enhancements

- Fixed multiple minor version upgrade issues to improve connection preservation with zero-downtime patching.
- Reduced database boot time due to improved initialization time for large volumes.
- Introduced faster COPY operations by reducing contention on the relation extension lock and proactively extending relations.
- Improvements to reduce replication lag by intelligently skipping the replay of certain log records, thereby reducing the replay load.
- Fixed an issue during recovery conflict on a read node which, in rare cases, could cause brief unavailability.
- Fixed an issue where a database would fail to startup during a major version upgrade patch, in rare scenarios.
- Improved availability of read replicas by allowing recovery from replication errors in more situations.
- Fixed an issue resulting in a deadlock when a logical replication table synchronization operation fails.
- Fixed a logical replication decoding issue that fails to process catalog modifying changes after spilling to storage if there was a concurrent aborted sub-transaction.
- Improved log record validation before it is written to storage.
- Fixed an issue that would result in sessions incorrectly reporting ClientRead wait events after a zero-downtime patching event.
- Fixed an ambiguous function definition of aws_s3.query_export_to_s3 when upgrading the aws_s3 extension from version 1.1 to 1.2.

High priority enhancements

- Fixed an issue related to resuming a logical replication slot where, in rare cases, it could cause the slot to become stuck.
- Fixed an issue that would result in a restart when creating a database in a tablespace.
- Fixed an issue related to incorrect logical replication error handling to improve DB stability.

Critical stability enhancements

- Fixed an issue related to replication origins that in rare cases might result in longer recovery time and impact availability.
- Fixed an issue that in rare cases may cause transactions to be partially replicated by newly created logical replication slots. For more information, see Potential data loss due to race condition during logical replication slot creation.
- Fixed an issue where `pg_stat_statements` can cause zero-downtime patching to fail.
- Fixed an issue where a change in memory requirements during a minor version upgrade can cause zero-downtime patching and engine startup to fail.

Additional improvements and enhancements

- Updated the following extensions:
  - `pg_tle` extension to version 1.3.4.
  - PLV8 extension to version 3.1.10.
  - RDKit Cartridge to version Release_2023_09_4.
- New GUC Parameters has been added
  - `pgtle.clientauth_databases_to_skip`
  - `pgtle.clientauth_db_name`
  - `pgtle.clientauth_num_parallel_workers`
  - `pgtle.clientauth_users_to_skip`
  - `pgtle.enable_clientauth`
  - `pgtle.passcheck_db_name`

PostgreSQL 16.1 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 16.1. For more information about the improvements in PostgreSQL 16.1, see PostgreSQL release 16.1.

Releases and patches

- Aurora PostgreSQL 16.1.8, July 30, 2025
- Aurora PostgreSQL 16.1.7, April 22, 2025
- Aurora PostgreSQL 16.1.6, February 5, 2025
- Aurora PostgreSQL 16.1.5, September 17, 2024
- Aurora PostgreSQL 16.1.4, June 24, 2024
- Aurora PostgreSQL 16.1.3, March 13, 2024
- Aurora PostgreSQL 16.1.2, February 22, 2024
- Aurora PostgreSQL 16.1, January 31, 2024

Aurora PostgreSQL 16.1.8, July 30, 2025

Critical stability enhancements

- Fixed an issue related to the interaction between Aurora Serverless scaling and the improved reader availability functionality that might result in longer recover times and impact availability.
- Fixed an issue in the rds_activity_stream extension that could cause brief periods of unavailability during configuration reloads and when maximum connections are consumed.

General enhancements

- Fixed an issue in handling of asynchronous I/O cancellation that could cause processes to become stuck indefinitely.
- Fixed an issue in the read replica deletion which could result in a vaccum being held back and causing eventual unavailability of database.
- Fixed an issue that can cause process stuck indefinitely at LWLock:BufferIO wait event.
- Added support of newly released Regions for the aws_s3 extension.
- Fixed an issue where unexpected internal communication channel re-establishments may cause increased latency on data processing.

Aurora PostgreSQL 16.1.7, April 22, 2025

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-1094.

General enhancements

- Fixed an issue on the replica where a network interruption may not correctly re-establish connection with the writer.

Aurora PostgreSQL 16.1.6, February 5, 2025

Critical Priority enhancements

- Fixed a security issue in the `rds_activity_stream` extension.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2024-10979.
  - CVE-2024-10978.
  - CVE-2024-10977.
  - CVE-2024-10976.
- Fixed an issue for date functions to allow them to take into account the local/session timezone setting.
- Fixed an issue in Global DB switchover and failover that can result in customers needing to rebuild their mirror clusters.
- Fixed CVE-2020-6418 for V8 Engine in the PLV8 extension.

General enhancements.

- Fixed an ownership issue where the `postgis_raster` extension could not be updated correctly from a previous the `PostGIS` extension v2 installation.

Aurora PostgreSQL 16.1.5, September 17, 2024

High priority enhancements

- Fixed issues where the replication of vacuum operations may cause a restart when handling conflicts with user queries.
- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-7348

Aurora PostgreSQL 16.1.4, June 24, 2024

General enhancements

- Fixed multiple issues where minor version upgrades with ZDP would fail resulting in longer upgrade times.

High priority enhancements

- Fixed an issue with Parallel query execution in which a backend may get into indefinite hang in certain cases.
- Fixed a crash with execution of pltsql user defined functions.
- Fixed an issue which led to cancellation of long-running queries on Global Database replica instances.

Critical stability enhancements

- Fixed an issue where a change in memory requirements during a minor version upgrade can cause zero-downtime patching and engine startup to fail.
- Fixed a pg_repack issue causing two vacuums to concurrently process the same table.

Aurora PostgreSQL 16.1.3, March 13, 2024

General enhancements

- Fixed a performance degradation issue in PLV8 extension.

Aurora PostgreSQL 16.1.2, February 22, 2024

General enhancements

- Allow `rds_superuser` to terminate backends which are not explicitly associated with a role.

High priority enhancements

- Fixed an issue where `pg_stat_statements` can block minor version upgrade during ZDP.
- Fixed an issue where a logical replication slot would no longer emit changes due to an overly strict data consistency check.
- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-0985

Critical stability enhancements

- Fixed an issue related to `apg_plan_mgmt`.
- Fixed a deadlock issue in Aurora Storage which can result in writer failover.
- Fixed an issue where active transactions during logical replication slot creation may be partially replicated by the slot.

Aurora PostgreSQL 16.1, January 31, 2024

New features

- Added support for the HypoPG extension at version 1.4.0.
- Added support for the `h3-pg` extension and the `h3-postgis` extension at version 4.1.3.
- Added support for `aurora_compute_plan_id` parameter which is turned on by default in an Aurora PostgreSQL DB Cluster and DB Parameter Group. For more information, see Monitoring query execution plans for Aurora PostgreSQL.
- The `rds.rds_superuser_reserved_connections` parameter has been deprecated in Aurora PostgreSQL version 16. The `reserved_connections` parameter should be utilized to reserve the number of connection slots. The `reserved_connections` parameter sets the number of connection slots reserved for roles with the `pg_use_reserved_connections` privileges. `rds_superuser` is a member of the `pg_use_reserved_connections` role by default. For more information, see the PostgreSQL documentation reserved connections.

General enhancements

- Deprecated support for ssl protocols: TLSv1.0 and TLSv1.1.

Additional improvements and enhancements

Updated the following extensions:

- `postgis` to version 3.4.0
- `PgLogical` to version 2.4.4
- `PgCron` to version 1.6
- `orafce` to version 4.6.0
- `pg_hint_plan` to version 1.6.0
- `plv8` to version 3.1.8
- `oracle_fdw` to version 2.6.0
- `MySQL_FDW` to version 2.9.1
- `Hll` to version 2.18
- `RDKit` to version 4.4
- `aws_s3` to version 1.2
- `prefix` to version 1.2.10
- `pg_similarity` to version 1.0
- `pgdam` to version 1.7
- `pg_proctab` to version 0.0.10
- `pg_tle` to version 1.2.0
- `pg_vector` to version 0.5.1
- `PgAudit` to version 16.0
- `plprofiler` to version 4.2.4
- `pg_partman` to version 4.7.3
- `pgTAP` to version 1.3.0

For information about extensions and modules, see Extensions supported for Aurora PostgreSQL 16.

PostgreSQL 15 versions (includes some deprecated versions)

Version updates

- PostgreSQL 15.18
- PostgreSQL 15.17
- PostgreSQL 15.15
- PostgreSQL 15.14
- PostgreSQL 15.13
- PostgreSQL 15.12
- PostgreSQL 15.10
- PostgreSQL 15.8 (Deprecated)
- PostgreSQL 15.7 (Deprecated)
- PostgreSQL 15.6 (Deprecated)
- PostgreSQL 15.5 (Deprecated)
- PostgreSQL 15.4 (Deprecated)
- PostgreSQL 15.3 (Deprecated)
- PostgreSQL 15.2 (Deprecated)

PostgreSQL 15.18

This release of Aurora PostgreSQL is compatible with PostgreSQL 15.18. For more information about the improvements in PostgreSQL 15.18, see PostgreSQL release 15.18.

Releases and patches

- Aurora PostgreSQL 15.18.1, August 21, 2026
- Aurora PostgreSQL 15.18, August 21, 2026

Aurora PostgreSQL 15.18.1, August 21, 2026

Critical stability enhancements

- Fixed an issue in the Aurora Storage Daemon that in rare cases could impact availability.

Aurora PostgreSQL 15.18, August 21, 2026

Critical stability enhancements

- Fixed an issue that in rare cases could lead to unavailability for Aurora Replica clusters after a restart.

High priority enhancements

- Back-ported fixes for the following PostgreSQL community security issues:
  - CVE-2026-6472
  - CVE-2026-6473
  - CVE-2026-6474
  - CVE-2026-6475
  - CVE-2026-6476
  - CVE-2026-6477
  - CVE-2026-6478
  - CVE-2026-6479
  - CVE-2026-6575
  - CVE-2026-6637
  - CVE-2026-6638
- Fixed an issue that could cause upgrades to take a few seconds longer due to an unexpected termination of the logging process.

General enhancements

- Improved Aurora storage metadata management memory usage when managing tens of millions of objects and files.
- Improved commit latency for Aurora Serverless instances when I/O optimized is enabled.
- Improved Aurora Replica availability and replay throughput by eliminating unnecessary buffer cache allocation and I/O during write-ahead-log replay for all operations.
- Fixed an issue where an internal timeout during Zero-Downtime Patching could exceed its intended duration, causing unnecessary fallback to a standard restart with longer downtime.

- Added support for the `plv8.memory_limit` parameter, allowing customers to configure the memory limit for the plv8 extension. For more information, see plv8 documentation.
- Fixed an issue where GRANT SET ON PARAMETER on extension parameters could bypass intended parameter privilege restrictions. Grants on unregistered extension parameters are no longer permitted, and GRANT SET ON PARAMETER privileges on restricted parameters are no longer honored for non-superuser roles.
- Fixed a security issue in trusted PL/Perl that could allow privilege escalation.
- Fixed multiple security issues in trusted PL/Tcl that could allow code execution or cause brief periods of unavailability.
- Added a safety guard within a diagnostic logging function to prevent a crash.
- Fixed a race condition in encryption key initialization that could cause a brief period of unavailability.
- Fixed an issue where Zero-Downtime Patching (ZDP) could fall back to regular patching on inbound replicas, resulting in slightly higher downtime during maintenance operations.
- Fixed an issue with the multitransaction system that could cause database unavailability.
- Fixed an issue that can cause a database instance to restart due to a memory management issue in storage node connection handling.
- Updated the following extensions:
  - PostGIS to version 3.5.6.
  - pg_partman to version 5.4.3.
  - PgTAP to version 1.3.4.
  - pgvector to version 0.8.2.
  - PgCollection to version 1.1.1.

PostgreSQL 15.17

This release of Aurora PostgreSQL is compatible with PostgreSQL 15.17. For more information about the improvements in PostgreSQL 15.17, see PostgreSQL release 15.17.

Releases and patches

- Aurora PostgreSQL 15.17.3, July 20, 2026
- Aurora PostgreSQL 15.17.2, June 1, 2026
- Aurora PostgreSQL 15.17, April 6, 2026

Aurora PostgreSQL 15.17.3, July 20, 2026

Critical stability enhancements

- Fixed an issue that in rare cases could prevent failovers from completing to the intended failover target.
- Fixed an issue that in rare cases could lead to database unavailability for read node clusters after a restart.
- Fixed an issue with the multitransaction system that could cause database unavailability.
- Fixed an issue in Babelfish where table-valued parameters would store only the last row N times, where N is the total number of rows provided.
- Fixed an issue that improves B-tree prefetch performance when index scans were not properly utilizing prefetch buffers.

General enhancements

- Fixed an issue where GRANT SET ON PARAMETER incorrectly allowed permissions to be granted for non-existent extension parameters.
- Fixed an issue where an internal timeout during Zero-Downtime Patching could exceed its intended duration, causing unnecessary fallback to a standard restart with increased downtime.
- Fixed an issue where go-sqlcmd v1.9.0 failed to return query results.

Aurora PostgreSQL 15.17.2, June 1, 2026

Critical stability enhancements

- Fixed an issue with the multitransaction system that could cause database unavailability

High priority enhancements

- Fixed an issue with suboptimal B-tree prefetch causing increased I/O wait times.
- Back-ported fixes for the following PostgreSQL community security issues:
  - CVE-2026-6472
  - CVE-2026-6473
  - CVE-2026-6474

- CVE-2026-6475
- CVE-2026-6476
- CVE-2026-6477
- CVE-2026-6478
- CVE-2026-6479
- CVE-2026-6575
- CVE-2026-6637
- CVE-2026-6638

Aurora PostgreSQL 15.17, April 6, 2026

New features

- Enhanced Aurora patch version upgrades to minimize downtime through reliable, simplified connection transfer and accelerated connection restoration.

Critical stability enhancements

- Fixed an issue which can lead to an unnecessary storage checkpoint during database startup leading to prolonged database startup time.
- Fixed a race condition that could prevents failovers from completing to intended failover target.
- Fixed a timing condition in the aws_s3 extension which, in rare cases, can cause database unavailability.
- Fixed an issue that may cause non-failover target reader instances to restart when they attempt to connect to the new writer instance following a failover.

High priority enhancements

- Fixed an issue in cache initialization that could cause a crash during database startup..
- Fixed an issue in the Aurora Storage Daemon that could lead to brief periods of unavailability when enhanced logical replication is enabled.
- Fixed an issue in global databases planned switchover that would cause the switchover to be stuck waiting for a volume growth.
- Back-ported fixes for the following PostgreSQL community security issues:

- CVE-2026-2003
- CVE-2026-2004
- CVE-2026-2005
- CVE-2026-2006
- CVE-2026-2007

General enhancements

- Updated the following extensions:
  - aws_s3 to version 2.0.
  - pg_bigm to version 1.2_20250903.
  - pg_hint_plan to version 1.5.3.
  - tds_fdw to version 2.0.5.
  - mysql_fdw to version REL-2_9_3.
  - pg_cron to version 1.6.7.
  - orafce to version 4.16.3.
  - hypopg to version 1.4.2.
  - pglogical to version 2.4.6.
  - pgvector to version 0.8.1.
  - pg_repack to version 1.5.3.
  - oracle_fdw to version 2.8.0.
- Fixed small memory leaks during database startup and replication.
- Fixed an issue that could cause file handles to not be properly released after upgrade.
- Fixed max_wal_size configuration to properly trigger a checkpoint if WAL produced since the prior checkpoint exceeds the parameter value.
- Improved Aurora Replica availability by reducing buffer cache contention during write-ahead-log replay.
- Fixed an issue with pg_hint_plan where session configuration parameters requiring rds_superuser permissions could not be set in hints.
- Fixed an issue in the orafce extension which, in rare cases, can cause database unavailability.
- Fixed ANALYZE operations to work correctly on tables containing large LOB data.

- Fixed an issue where infinite recursion within a plv8 procedure could cause database unavailability.
- Fixed an issue where ALTER FUNCTION could fail with "routine name is not unique".

PostgreSQL 15.15

This release of Aurora PostgreSQL is compatible with PostgreSQL 15.15. For more information about the improvements in PostgreSQL 15.15, see PostgreSQL release 15.15.

Releases and patches

- Aurora PostgreSQL 15.15.5, July 20, 2026
- Aurora PostgreSQL 15.15.4, June 9, 2026
- Aurora PostgreSQL 15.15.3, May 29, 2026
- Aurora PostgreSQL 15.15.2, March 20, 2026
- Aurora PostgreSQL 15.15.1, January 16, 2026
- Aurora PostgreSQL 15.15, Decemeber, 18, 2025

Aurora PostgreSQL 15.15.5, July 20, 2026

Critical stability enhancements

- Fixed an issue that in rare cases could prevent failovers from completing to the intended failover target.
- Fixed an issue that in rare cases could lead to database unavailability for read node clusters after a restart.
- Fixed an issue in Babelfish where table-valued parameters would store only the last row N times, where N is the total number of rows provided.
- Fixed an issue that improves B-tree prefetch performance when index scans were not properly utilizing prefetch buffers.

General enhancements

- Fixed an issue where GRANT SET ON PARAMETER incorrectly allowed permissions to be granted for non-existent extension parameters.

- Fixed an issue where an internal timeout during Zero-Downtime Patching could exceed its intended duration, causing unnecessary fallback to a standard restart with increased downtime.

Aurora PostgreSQL 15.15.4, June 9, 2026

High priority enhancements

- Fixed an issue with suboptimal B-tree prefetch causing increased I/O wait times.
- Back-ported fixes for the following PostgreSQL community security issues:
  - CVE-2026-6472
  - CVE-2026-6473
  - CVE-2026-6474
  - CVE-2026-6475
  - CVE-2026-6476
  - CVE-2026-6477
  - CVE-2026-6478
  - CVE-2026-6479
  - CVE-2026-6575
  - CVE-2026-6637
  - CVE-2026-6638

Aurora PostgreSQL 15.15.3, May 29, 2026

Critical stability enhancements

- Fixed an issue where ALTER FUNCTION could fail with "routine name is not unique".

Aurora PostgreSQL 15.15.2, March 20, 2026

Critical stability enhancements

- Fixed a bug in the aws_s3 extension which, in rare circumstances, can cause database unavailability.
- Fixed an issue where read nodes may restart when attempting to connect to the new write node following a failover.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2026-2003.
  - CVE-2026-2004.
  - CVE-2026-2005.
  - CVE-2026-2006.
  - CVE-2026-2007.
  - CVE-2026-3172.
- Fixed a bug in Query Plan Management that prevented plan capture.
- Fixed a bug in the Aurora Storage Daemon that could cause database unavailability in rare cases when enhanced logical replication is enabled.
- Fixed an issue where file handlers could remain improperly allocated after a major version upgrade.
- Fixed an issue where databases could run out of memory due to excessive storage metadata in rare circumstances.
- Fixed a bug in the logging utility that could cause database unavailability due to buffer overflow in rare circumstances.
- Fixed an issue in cache initialization that could cause database unavailability during startup.
- Fixed an issue where global databases planned switchover operations could become unresponsive while waiting for storage volume growth to complete.

General enhancements

- Fixed an issue where ANALYZE operations did not work correctly on tables containing large LOB data
- Fixed an issue where correlated any transform could return an error message 'failed to build any 3-way joins' during transformation.
- Fixed an issue where optimization was not triggered due to incorrect tracking of transaction metadata.

Aurora PostgreSQL 15.15.1, January 16, 2026

Critical stability enhancements

- Fixed a timing condition in the aws_s3 extension which, in rare cases, can cause database unavailability

Aurora PostgreSQL 15.15, Decemeber, 18, 2025

New features

- Introduced a change which improves static availability of Aurora PostgreSQL writers when, in rare conditions, write operations to storage are delayed due to undergoing storage node maintenance.
- Improvements to minimize switchover downtime during Blue/Green switchover operations, by temporarily blocking transaction commit operations on the Blue environment prior to switchover, reducing drift between the Blue and Green clusters.
- Improved recovery time by optimizing commit log (clog) loading during database cold starts and unplanned restarts, with significant benefits for smaller instances with limited CPU cores.

Critical stability enhancements

- Improved cold start performance through faster cache initialization.
- Reduced memory footprint for idle connections in Serverless v2 instances.

High priority enhancements

- Back-ported fixes for the following PostgreSQL community security issues:
  - CVE-2025-12818
  - CVE-2025-12817
- Fixed a database shutdown issue that could cause major version upgrades to fail.
- Fixed a rare major version upgrade failure with large memory allocations.
- Fixed an issue preventing rds_superuser from managing prepared transactions owned by other users.

General enhancements

- Updated the following extensions:
  - h3_pg to version 4.2.3.

- Fixed a race condition in Postgres lock release with optimized read enabled.
- Improved PgAudit memory usage during parameter-heavy operations.
- Fixed database initialization failure when max_connections is set to low values.
- Improved Serverless v2 scaling performance under high CPU load.
- Improved Serverless v2 write performance.
- Fixed delays in Serverless v2 scale-down operations.
- Fixed multiple low-risk memory leaks.
- Improved database shutdown during maintenance to enhance availability.
- Improved database startup performance through optimized storage initialization.
- Fixed storage metadata initialization issue that could delay engine startup.
- Fixed region determination failures in aws_s3, aws_ml, and aws_lambda extensions.
- Fixed crash scenario when using pg_buffercache extension during Serverless v2 scaling.

PostgreSQL 15.14

This release of Aurora PostgreSQL is compatible with PostgreSQL 15.14. For more information about the improvements in PostgreSQL 15.14, see PostgreSQL release 15.14.

Releases and patches

- Aurora PostgreSQL 15.14.5, July 20, 2026
- Aurora PostgreSQL 15.14.4, June 12, 2026
- Aurora PostgreSQL 15.14.2, April 22, 2026
- Aurora PostgreSQL 15.14.1, November 25, 2025
- Aurora PostgreSQL 15.14, November 25, 2025

Aurora PostgreSQL 15.14.5, July 20, 2026

Critical stability enhancements

- Fixed an issue in Babelfish where table-valued parameters would store only the last row N times, where N is the total number of rows provided.
- Fixed an issue that improves B-tree prefetch performance when index scans were not properly utilizing prefetch buffers.

General enhancements

- Fixed an issue where GRANT SET ON PARAMETER incorrectly allowed permissions to be granted for non-existent extension parameters.

Aurora PostgreSQL 15.14.4, June 12, 2026

High priority enhancements

- Fixed an issue with suboptimal B-tree prefetch causing increased I/O wait times.
- Back-ported fixes for the following PostgreSQL community security issues:
  - CVE-2026-6472
  - CVE-2026-6473
  - CVE-2026-6474
  - CVE-2026-6475
  - CVE-2026-6476
  - CVE-2026-6477
  - CVE-2026-6478
  - CVE-2026-6479
  - CVE-2026-6575
  - CVE-2026-6637
  - CVE-2026-6638

Aurora PostgreSQL 15.14.2, April 22, 2026

Critical stability enhancements

- Fixed a bug in the aws_s3 extension which, in rare circumstances, can cause database unavailability.
- Fixed an issue where read nodes may restart when attempting to connect to the new write node following a failover.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:

- CVE-2026-2003.
- CVE-2026-2004.
- CVE-2026-2005.
- CVE-2026-2006.
- CVE-2026-2007.
- CVE-2026-3172.

- Fixed a bug in Query Plan Management that prevented plan capture.
- Fixed a bug in the Aurora Storage Daemon that could cause database unavailability in rare cases when enhanced logical replication is enabled.
- Fixed an issue that can result in reader unavailability during catching up with the writer instance
- Fixed an issue where file handlers could remain improperly allocated after a major version upgrade.
- Fixed an issue where databases could run out of memory due to excessive storage metadata in rare circumstances.
- Fixed an issue in cache initialization that could cause database unavailability during startup.
- Fixed an issue where global databases planned switchover operations could become unresponsive while waiting for storage volume growth to complete.

General enhancements

- Fixed an issue where ANALYZE operations did not work correctly on tables containing large LOB data
- Fixed an issue to reduce CPU overhead while establishing Encryption in Transit between the database engine and the storage layer.
- Fixed improper handling of empty response during connection loss with storage nodes
- Fixed an issue where correlated any transform could return an error message 'failed to build any 3-way joins' during transformation.
- Fixed an issue where optimization was not triggered due to incorrect tracking of transaction metadata.
- Fixed an issue where ALTER FUNCTION could fail with "routine name is not unique".

Aurora PostgreSQL 15.14.1, November 25, 2025

Critical stability enhancements

- Fixed a database shutdown issue which could cause major version upgrade to fail.
- Fixed an Issue that could cause readers to restart or readers cannot perform read operations due to missing storage segments

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-12817
  - CVE-2025-12818
- Fixed an issue with the cleanup of files created by NOTIFY channels, which could lead to high local storage usage.

General enhancements

- Fixed an issue that could cause delays in scaling down for Serverless V2 instances.
- Fixed IMDS throttling issues by reducing IMDS requests for region related information.

Aurora PostgreSQL 15.14, November 25, 2025

New features

- Introduced a new feature to significantly reduce database downtime during restarts by initializing Aurora storage metadata in parallel and reducing contention during initialization.

Critical stability enhancements

- Fixed an issue related to Optimized Reads-enabled tiered cache functionality that might result in longer recovery times after a failover to Aurora replica instances.

High priority enhancements

- Back-ported fixes for the following PostgreSQL community security issues:

- CVE-2025-8713
- CVE-2025-8714
- CVE-2025-8715
- Fixed an issue in logical replication where subscriber databases could skip replicating transactions after recovering from a crash.
- Fixed an issue which can cause vacuum operations to become blocked after the restart of an Aurora replica in a Global Database.
- Fixed a security issue when altering routine ownership.

General enhancements

- Updated the following extensions:
  - oracle_fdw to version to 2.8.0
  - pg_repack extension to version 1.5.2
  - aws_lamba extension to version 2.0
- Improved file metadata initialization times.
- Fixed an issue that caused reader instance to restart when attempting to create PostgreSQL SLRU files.
- Fixed an issue which caused prolonged Serverless v2 scaling time.
- Fixed an issue that could cause database restart during Serverless v2 scaling.
- Fixed a timing issue in replication diagnostics that could prevent accurate reporting of Aurora replica recovery status when state transitions occur in rapid succession.
- Updated the aws_lambda extension to version 2.0, which resolves a performance issue that was present in version 1.0.
- Added support to include Geodetic TIFF grid files for PROJ.
- Fixed an issue that could cause database restart during aws_s3 export.
- Addressed an issue with logging when replication slots are invalidated.
- Fixed CVE-2023-3079 for V8 Engine in the PLV8 extension.
- Fixed an issue with parallel heap scans that could lead to index inconsistency on tables larger than 16TiB when synchronize_seqscans is enabled.
- Fixed an issue where read queries may time out on Aurora replica nodes during the replay of lazy truncation triggered by vacuum on the writer node.

- Fixed a crash that occurred when using ST_AsGeoJSON after upgrading to a release containing PostGIS 3.5.1 without running postgis_extensions_upgrade.
- Fixed an issue which prevented online recovery of an Aurora Replica forcing offline recovery.

PostgreSQL 15.13

This release of Aurora PostgreSQL is compatible with PostgreSQL 15.13. For more information about the improvements in PostgreSQL 15.13, see PostgreSQL release 15.13.

Releases and patches

- Aurora PostgreSQL 15.13.6, July 29, 2026
- Aurora PostgreSQL 15.13.5, June 12, 2026
- Aurora PostgreSQL 15.13.4, January 15, 2026
- Aurora PostgreSQL 15.13.3, September 16, 2025
- Aurora PostgreSQL 15.13.2, August 8, 2025
- Aurora PostgreSQL 15.13.1, June 30, 2025
- Aurora PostgreSQL 15.13, June 30, 2025

Aurora PostgreSQL 15.13.6, July 29, 2026

Critical stability enhancements

- Fixed an issue in Babelfish where table-valued parameters would store only the last row N times, where N is the total number of rows provided.
- Fixed an issue that improves B-tree prefetch performance when index scans were not properly utilizing prefetch buffers.

General enhancements

- Fixed an issue where GRANT SET ON PARAMETER incorrectly allowed permissions to be granted for non-existent extension parameters.

Aurora PostgreSQL 15.13.5, June 12, 2026

Critical stability enhancements

- Fixed a bug in the aws_s3 extension which, in rare circumstances, can cause database unavailability.
- Fixed an issue where read nodes may restart when attempting to connect to the new write node following a failover.

High priority enhancements

- Fixed an issue with suboptimal B-tree prefetch causing increased I/O wait times.
- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2026-2003.
  - CVE-2026-2004.
  - CVE-2026-2005.
  - CVE-2026-2006.
  - CVE-2026-2007.
  - CVE-2026-3172.
  - CVE-2026-6472
  - CVE-2026-6473
  - CVE-2026-6474
  - CVE-2026-6475
  - CVE-2026-6476
  - CVE-2026-6477
  - CVE-2026-6478
  - CVE-2026-6479
  - CVE-2026-6575
  - CVE-2026-6637
  - CVE-2026-6638
- Fixed a bug in Query Plan Management that prevented plan capture.
- Fixed a bug in the Aurora Storage Daemon that could cause database unavailability in rare cases when enhanced logical replication is enabled.
- Fixed an issue that can result in reader crash during catching up with the writer instance.
- Fixed an issue in cache initialization that could cause database unavailability during startup.

- Fixed an issue where global databases planned switchover operations could become unresponsive while waiting for storage volume growth to complete.

Security enhancements

- Fixed a bug in the babelfish_set_role function that improved permission validation when setting roles.

General enhancements

- Fixed an issue to reduce CPU overhead while establishing Encryption in Transit between the database engine and the storage layer.
- Fixed improper handling of empty response during connection loss with storage nodes.
- Fixed an issue where correlated any transform could return an error message 'failed to build any 3-way joins' during transformation.
- Fixed an issue where ALTER FUNCTION could fail with "routine name is not unique".

Aurora PostgreSQL 15.13.4, January 15, 2026

Critical stability enhancements

- Fix an issue which could trigger a race in change data capture (CDC) volume expansion.
- Process cleanup improvements during zero downtime patching to ensure that all database processes are properly terminated, preventing shutdown stalls and improving zero downtime patching success.
- Fixed a database shutdown issue which could cause major version upgrade to fail.
- Fixed an Issue that could cause readers to restart or readers cannot perform read operations due to missing storage segments.

High priority enhancements

- Fixed an issue which could cause a restart during the start of logical replication data synchronization.
- Fixed an issue with the cleanup of files created by NOTIFY channels, which could lead to high local storage usage.

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-12817.

    CVE-2025-12818.

General enhancements

- Fixed an issue that could cause delays in scaling down for Serverless V2 instances.
- Fixed IMDS throttling issues by reducing IMDS requests for region related information.

Aurora PostgreSQL 15.13.3, September 16, 2025

Critical stability enhancements

- Fixed an issue in engine minor and patch upgrades where in rare cases a backend can incorrectly process an interrupt early.
- Fixed an issue where minor version upgrades and patch upgrades might take a few seconds longer because the runtime process wasn't exiting gracefully.
- Fixed an issue related to Optimized Reads-enabled tiered cache functionality that might result in longer recovery times after a failover to Aurora replica instances.
- Fixed a security issue when altering routine ownership.
- Fixed an issue with Serverless v2 scaling that may cause unavailability when fetching pages from storage.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-8713.
  - CVE-2025-8714.
  - CVE-2025-8715.
- Backported fixes for the following PLv8 extension’s V8 Engine security vulnerabilities:
  - CVE-2022-1364.
  - CVE-2023-3079.
- Fixed a race where old writer may not step down after a new writer is promoted and continues to write.

General enhancements

- Fixed an issue that could in certain cases prevent online recovery of an Aurora Replica from completing.
- Fixed an issue that could cause unavailability when `apg_plan_mgmt` is enabled.
- Fixed an issue with parallel heap scans that could lead to index inconsistency on tables larger than 16TiB when synchronize_seqscans is enabled.
- Fixed an issue in Query Plan Management with running a utility statement immediately after installing the extension or resetting shared memory.
- Fixed an issue with Babelfish ZDP that could lead to instance reboot after minor version ugprade in some cases.
- Fixed an issue in enforcing, validating and evolving the `plans` extension in Query Plan Management.
- Fixed an issue during numeric calculations involving aggregate functions with all-column selections.
- Fixed an issue with prolonged Serverless v2 scaling time.
- Fixed a crash that occurred when using ST_AsGeoJSON after upgrading to a release containing The `PostGIS` extension 3.5.1 without running postgis_extensions_upgrade.
- Fixed an issue causing a replica restart during the replica join case.
- Fixed an issue which can cause vacuum operations to become blocked after the restart of an Aurora replica in a Global Database.
- Fixed and issue where storage client may crash during instance restart.

Aurora PostgreSQL 15.13.2, August 8, 2025

Critical stability enhancements

- Fixed an issue which could prevent logical replication from resuming after upgrade.
- Fixed an issue with Serverless v2 scaling that may cause unavailability when performing reads from Aurora Storage.

Aurora PostgreSQL 15.13.1, June 30, 2025

High priority enhancements

- Fixed a performance issue affecting instance restart operations.

Aurora PostgreSQL 15.13, June 30, 2025

New features

- Improved Serverless v2 scaling for storage bound workloads.
- Improved Serverless v2 scaling through optimized management of memory maps.
- Aurora has doubled its maximum storage capacity from 128 TiB to 256 TiB. This increased storage limit allows customers to manage larger workloads in a single DB cluster. To access the increased storage limit for Aurora PostgreSQL, upgrade your DB cluster to version 17.5, 16.9, 15.13, or higher. Once upgraded, Aurora storage will automatically scale up to 256 TiB capacity based on the amount of data in the cluster volume.

Critical stability enhancements

- Fixed an issue where Serverless instances would fail to perform Zero Downtime Patching after automatic resume.
- Added library dependency verification during minor and patch upgrades to ensure storage metadata recovery is safe before proceeding.

High priority enhancements

- Fixed an issue in the rds_activity_stream extension that could cause brief periods of unavailability during configuration reloads.
- Fixed an issue where server will fail to start if a previous startup was prematurely terminated.

General enhancements

- Updated the following extensions:
  - apg_plan_mgmt to 2.9.
  - The `pgaudit` extension to 1.7.1.
  - The `rdkit` extension to 4.6.1 (2024_09_6).
  - The `pg_repack` extension to 1.5.1.
  - The `pglogical` extension to 2.4.5.

- Improvements to make Serverless v2 scaling more efficient on reader nodes.
- Fixed an issue that prevents Zero Downtime Patching from completing successfully on Serverless v2 auto-pause enabled instances.
- Fixed an issue in pgdam that causes the engine (with pgdam enabled) to crash when hitting maximum connections.
- Fixed an issue in the `pg_bigm` extension that can cause unavailability when the extension interacts with the GIN index.
- In Blue/Green deployments, creating or modifying temporary objects is no longer classified as restricted DDL.
- Added validation to ensure only predefined GUCs with `aurora_stat_plans` the `prefix` extension are accepted on SET or SHOW commands.
- Added function aurora_stat_resource_usage() to report current CPU usage, allocated and used memory for all the backends.
- Fixed an issue which prevented Zero Downtime Patching when cache recovery is disabled.
- Fixed a synchronization issue where Zero Downtime Patching could fail due to premature engine ready state reporting.
- Fixed an issue in checkpoint replication to have storage metadata position be consistent in reader.
- Fixed an issue which causes RO node to restart while its reconnecting to RW node.
- Fixed an issue where RO client process can be stuck in LWLock:BufferIO wait event after being disconnected from the writer.
- Fixed an issue where RO node could crash when frequently falling behind RW node.
- Fixed an issue in the aws_s3 extension that could cause an import operation to restart and reinsert previously inserted rows.
- Improved performance of EXPLAIN operations for queries involving tables with many columns and complex relations.

PostgreSQL 15.12

This release of Aurora PostgreSQL is compatible with PostgreSQL 15.12. For more information about the improvements in PostgreSQL 15.12, see PostgreSQL release 15.12.

Releases and patches

- Aurora PostgreSQL 15.12.8, August 05, 2026
- Aurora PostgreSQL 15.12.7, June 26, 2026
- Aurora PostgreSQL 15.12.6, May 07, 2026
- Aurora PostgreSQL 15.12.5, February 19, 2026
- Aurora PostgreSQL 15.12.4, October 9, 2025
- Aurora PostgreSQL 15.12.3, June 03, 2025
- Aurora PostgreSQL 15.12.2, May 01, 2025
- Aurora PostgreSQL 15.12, April 07, 2025

Aurora PostgreSQL 15.12.8, August 05, 2026

Critical stability enhancements

- Fixed an issue in Babelfish where table-valued parameters would store only the last row N times, where N is the total number of rows provided.
- Fixed an issue that improves B-tree prefetch performance when index scans were not properly utilizing prefetch buffers.

General enhancements

- Fixed an issue where GRANT SET ON PARAMETER incorrectly allowed permissions to be granted for non-existent extension parameters.
- Fixed a performance issue with REINDEX operations on certain variable-size data types.

Aurora PostgreSQL 15.12.7, June 26, 2026

High priority enhancements

- Fixed an issue with suboptimal B-tree prefetch causing increased I/O wait times.
- Back-ported fixes for the following PostgreSQL community security issues:
  - CVE-2026-6472
  - CVE-2026-6473
  - CVE-2026-6474
  - CVE-2026-6475

- CVE-2026-6476
- CVE-2026-6477
- CVE-2026-6478
- CVE-2026-6479
- CVE-2026-6575
- CVE-2026-6637
- CVE-2026-6638

Aurora PostgreSQL 15.12.6, May 07, 2026

Critical stability enhancements

- Fixed a bug in the aws_s3 extension which, in rare circumstances, can cause database unavailability.
- Fixed an issue where read nodes may restart when attempting to connect to the new write node following a failover.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2026-2003.
  - CVE-2026-2004.
  - CVE-2026-2005.
  - CVE-2026-2006.
  - CVE-2026-2007.
  - CVE-2026-3172.
- Fixed a bug in Query Plan Management that prevented plan capture.
- Fixed a bug in the Aurora Storage Daemon that could cause database unavailability in rare cases when enhanced logical replication is enabled.
- Fixed an issue that can result in reader unavailability during catching up with the writer instance
- Fixed an issue in cache initialization that could cause database unavailability during startup.
- Fixed an issue where global databases planned switchover operations could become unresponsive while waiting for storage volume growth to complete.

General enhancements

- Fixed an issue to reduce CPU overhead while establishing Encryption in Transit between the database engine and the storage layer.
- Fixed an issue where correlated any transform could return an error message 'failed to build any 3-way joins' during transformation.
- Fixed an issue where ALTER FUNCTION could fail with "routine name is not unique".

Aurora PostgreSQL 15.12.5, February 19, 2026

Critical stability enhancements

- Fixed an issue that could cause garbage collection to get blocked on a change data capture (CDC) volume.
- Fix an issue which could trigger a race in change data capture (CDC) volume expansion.
- Process cleanup improvements during zero downtime patching to ensure that all database processes are properly terminated, preventing shutdown stalls and improving zero downtime patching success.
- Fixed a database shutdown issue which could cause major version upgrade to fail.
- Fixed an Issue that could cause readers to restart or readers cannot perform read operations due to missing storage segments.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-12817.
  - CVE-2025-12818.
- Fixed an issue which could cause a restart during the start of logical replication data synchronization.
- Fixed an issue where premature status updates during zero downtime patching could cause unnecessary failures by ensuring proper synchronization with server startup.
- Fixed an issue with the cleanup of files created by NOTIFY channels, which could lead to high local storage usage.

General enhancements

- Fixed IMDS throttling issues by reducing IMDS requests for region related information.

Aurora PostgreSQL 15.12.4, October 9, 2025

Critical stability enhancements

- Fixed an issue in engine minor and patch upgrades where in rare cases a backend can incorrectly process an interrupt early.
- Fixed an issue where minor version upgrades and patch upgrades might take a few seconds longer because the runtime process wasn't exiting gracefully.
- Fixed an issue related to Optimized Reads-enabled tiered cache functionality that might result in longer recovery times after a failover to Aurora replica instances.
- Fixed a security issue when altering routine ownership.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-8713.
  - CVE-2025-8714.
  - CVE-2025-8715.
- Backported fixes for the following PLv8 extension's V8 Engine security vulnerabilities:
  - CVE-2022-1364.
  - CVE-2023-3079.
- Fixed a race condition where old writer instance may not step down after a new writer instance is promoted and continues to write.

General enhancements

- Fixed an issue that could prevent online recovery of an Aurora Replica from completing.
- Fixed an issue that could cause unavailability when `apg_plan_mgmt` is enabled.
- Fixed an issue with parallel heap scans that could lead to index inconsistency on tables larger than 16TiB when synchronize_seqscans is enabled.
- Fixed an issue in Query Plan Management with running a utility statement immediately after installing the extension or resetting shared memory.

- Fixed an issue in enforcing, validating and evolving the `plans` extension in Query Plan Management.
- Fixed an issue during numeric calculations involving aggregate functions with all-column selections.
- Fixed an issue that could cause prolonged Serverless v2 scaling time.
- Fixed a crash that occurred when using ST_AsGeoJSON after upgrading to a release containing The `PostGIS` extension 3.5.1 without running postgis_extensions_upgrade.
- Fixed an issue causing a replica restart during the replica join case.
- Fixed an issue which can cause vacuum operations to become blocked after the restart of an Aurora replica in a Global Database.
- Fixed an issue causing query execution failure for execution the `plans` extension using the “bitmap heap scan” access method.
- Fixed an issue impacting query execution performance for execution the `plans` extension using the “bitmap heap scan” access method.
- Fixed and issue where storage client may crash during instance restart.

Aurora PostgreSQL 15.12.3, June 03, 2025

Critical stability enhancements

- Fixed an issue which can cause the database to become unresponsive when performing actions with Aurora Storage.
- Fixed an issue related to the interaction between Aurora Serverless scaling and the improved reader availability functionality that might result in longer recover times and impact availability.
- Fixed an issue in the `rds_activity_stream` extension that could cause brief periods of unavailability during configuration reloads and when maximum connections are consumed.
- Fixed an issue in handling parameter lists from previous versions of Query Plan Management.

General enhancements

- Fixed an issue in handling of asynchronous I/O cancellation that could cause processes to become stuck indefinitely.
- Fixed an issue where unexpected internal communication channel re-establishments may cause increased latency on data processing.

- Added support of newly released Regions for the aws_s3 extension.
- Fixed an issue that can cause process stuck indefinitely at LWLock:BufferIO wait event.
- Fixed an issue that can cause RO instance crash under heavy workload.
- Fixed an issue that causes minor version upgrades to fail with sleep/wake feature.

Aurora PostgreSQL 15.12.2, May 01, 2025

Critical priority enhancements

- Fixed an issue which can cause the database to become unresponsive when performing actions with Aurora storage.

Aurora PostgreSQL 15.12, April 07, 2025

New features

- Aurora Optimized Reads now enables users to resize the allocated space for Optimized Reads-enabled temporary objects on Aurora I/O-Optimized clusters using a dynamic parameter “aurora_temp_space_size”. For more information. see Aurora Optimized Reads.

Critical stability enhancements

- Improved private memory allocation instrumentation to reduce CPU overhead for compute-heavy workloads that frequently invoke aset and slab allocation calls with `palloc`.
- When the system is under critical memory pressure for an extended duration, the largest customer backend will be cancelled to prevent system from restarting due to out of memory.

High priority enhancements

- Fixed an issue where Aurora in-Region failovers would result in failures in database startup.
- Fixed a security issue in the `rds_activity_stream` extension.
- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-1094.

General enhancements

- Aurora storage metadata now initializes more quickly during unplanned failovers and server restarts, reducing overall downtime. Larger instances benefit the most by leveraging higher parallelism.
- Improved performance of file metadata operations.
- Made improvements to database downtime during a `planned` extension switchover for Global Databases.
- In Blue/Green deployments, creating or modifying temporary objects is no longer classified as restricted DDL.
  - Creating temporary objects with syntax such as CREATE TEMPORARY TABLE x AS SELECT * FROM isn't supported.
  - Creating indexes on temporary tables isn't supported.
- The Blue/Green deployment switchover won't be blocked by the `REFRESH MATERIALIZED VIEW` statement.
- Improved allocation of Write-Ahead Log (WAL) stream numbers, resulting in increased throughput for write-heavy workloads on the new Graviton 4 high-end instances.
- Fixed an issue where the query identifier (queryid) wasn't being correctly updated in pg_stat_activity when using extended protocol in pipeline mode.
- Fixed an issue where reader upgrade was taking longer than expected.
- Updated the following extensions:
  - Update the `pgvector` extension to 0.8.0.
  - Update the `pg_cron` extension to v1.6.5.
  - Update the `tds_fdw` extension to 2.0.4.
  - Update the `postgis` extension to 3.5.1.
  - Update the `pg_partman` extension to v5.2.4.
  - Update the `orafce` extension to 4.14.0.
  - Update the `rds_tools` extension to 1.9.
  - Update the `rdkit` extension to Release_2024_09_3.

PostgreSQL 15.10

This release of Aurora PostgreSQL is compatible with PostgreSQL 15.10. For more information about the improvements in PostgreSQL 15.10, see PostgreSQL release 15.10.

Releases and patches

- Aurora PostgreSQL 15.10.8, August 06, 2026
- Aurora PostgreSQL 15.10.7, January 28, 2026
- Aurora PostgreSQL 15.10.6, November 13, 2025
- Aurora PostgreSQL 15.10.5, June 24, 2025
- Aurora PostgreSQL 15.10.4, March 24, 2025
- Aurora PostgreSQL 15.10.3, February 13, 2025
- Aurora PostgreSQL 15.10.2, January 20th, 2025
- Aurora PostgreSQL 15.10.1, December 27, 2024
- Aurora PostgreSQL 15.10, December 27, 2024

Aurora PostgreSQL 15.10.8, August 06, 2026

Critical stability enhancements

- Fixed a bug in the aws_s3 extension which, in rare circumstances, can cause database unavailability.
- Fixed an issue where read nodes may restart when attempting to connect to the new write node following a failover.
- Fixed an issue in Babelfish where table-valued parameters would store only the last row N times, where N is the total number of rows provided.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2026-2003.
  - CVE-2026-2004.
  - CVE-2026-2005.
  - CVE-2026-2006.
  - CVE-2026-2007.
  - CVE-2026-3172.
  - CVE-2026-6472.

- CVE-2026-6473.
- CVE-2026-6474.
- CVE-2026-6475.
- CVE-2026-6476.
- CVE-2026-6477.
- CVE-2026-6478.
- CVE-2026-6479.
- CVE-2026-6575.
- CVE-2026-6637.
- CVE-2026-6638.

- Fixed a bug in the Aurora Storage Daemon that could cause database unavailability in rare cases when enhanced logical replication is enabled.
- Babelfish now restricts GRANT/REVOKE on any Babelfish created role via the PG port.
- Fixed an issue that can result in reader crash during catching up with the writer instance.

Security enhancements

- Fixed an issue in the babelfish_set_role function that caused incorrect permission validation when setting roles.

General enhancements

- Fixed an issue to reduce CPU overhead while establishing Encryption in Transit between the database engine and the storage layer.
- Fixed an issue where correlated any transform could return an error message "failed to build any 3-way joins" during transformation.
- Fixed an issue where ALTER FUNCTION could fail with "routine name is not unique".
- Fixed an issue where GRANT SET ON PARAMETER incorrectly allowed permissions to be granted for non-existent extension parameters.

Aurora PostgreSQL 15.10.7, January 28, 2026

Critical stability enhancements

- Fixed an issue that could cause garbage collection to get blocked on a change data capture (CDC) volume.
- Fix an issue which could trigger a race in change data capture (CDC) volume expansion.
- Process cleanup improvements during zero downtime patching to ensure that all database processes are properly terminated, preventing shutdown stalls and improving zero downtime patching success.
- Fixed an Issue that could cause readers to restart or readers cannot perform read operations due to missing storage segments.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-12817.
  - CVE-2025-12818.
- Fixed an issue where premature status updates during zero downtime patching could cause unnecessary failures by ensuring proper synchronization with server startup.

General enhancements

- Fixed IMDS throttling issues by reducing IMDS requests for region related information.

Aurora PostgreSQL 15.10.6, November 13, 2025

Critical stability enhancements

- Fixed an issue in engine minor and patch upgrades where in rare cases a backend can incorrectly process an interrupt early.
- Fixed an issue where minor version upgrades and patch upgrades might take a few seconds longer because the runtime process was not exiting gracefully.
- Fixed an issue related to Optimized Reads-enabled tiered cache functionality that might result in longer recovery times after a failover to Aurora replica instances.
- Fixed a security issue when altering routine ownership.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-8713.
  - CVE-2025-8714.
  - CVE-2025-8715.
- Backported fixes for the following PLv8 extension's V8 Engine security vulnerabilities:
  - CVE-2022-1364.
  - CVE-2023-3079.
- Fixed a race condition where old writer instance may not step down after a new writer instance is promoted and continues to write.

General enhancements

- Fixed an issue that could prevent online recovery of an Aurora Replica from completing.
- Fixed an issue that could cause unavailability when apg_plan_mgmt is enabled.
- Fixed an issue with parallel heap scans that could lead to index inconsistency on tables larger than 16TiB when synchronize_seqscans is enabled.
- Fixed an issue in Query Plan Management with running a utility statement immediately after installing the extension or resetting shared memory.
- Fixed an issue in enforcing, validating and evolving plans in Query Plan Management.
- Fixed an issue that could cause prolonged Serverless v2 scaling time.
- Fixed a crash that occurred when using ST_AsGeoJSON after upgrading to a release containing PostGIS 3.5.1 without running postgis_extensions_upgrade.
- Fixed an issue causing a replica restart during the replica join case.
- Fixed an issue which can cause vacuum operations to become blocked after the restart of an Aurora replica in a Global Database.
- Fixed an issue causing query execution failure for execution plans using the "bitmap heap scan" access method.
- Fixed an issue impacting query execution performance for execution plans using the "bitmap heap scan" access method.

Aurora PostgreSQL 15.10.5, June 24, 2025

Critical stability enhancements

- Fixed an issue related to the interaction between Aurora Serverless scaling and the improved reader availability functionality that might result in longer recover times and impact availability.
- Fixed an issue in the rds_activity_stream extension that could cause brief periods of unavailability during configuration reloads and when maximum connections are consumed.

General enhancements

- Fixed an issue in handling of asynchronous I/O cancellation that could cause processes to become stuck indefinitely.
- Fixed an issue that causes minor version upgrades to fail with sleep/wake feature.
- Fixed an issue that can cause process stuck indefinitely at LWLock:BufferIO wait event.
- Added support of newly released Regions for the aws_s3 extension.
- Fixed an issue where unexpected internal communication channel re-establishments may cause increased latency on data processing.

Aurora PostgreSQL 15.10.4, March 24, 2025

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-1094.

General enhancements

- Fixed an issue on the replica where a network interruption may not correctly re-establish connection with the writer.

Aurora PostgreSQL 15.10.3, February 13, 2025

High priority enhancements

- Fixed CVE-2020-6418 for V8 Engine in the PLV8 extension.

Aurora PostgreSQL 15.10.2, January 20th, 2025

Critical Priority enhancements

- Fixed a security issue in the rds_activity_stream extension.

High priority enhancements

- Fixed an issue in Global DB switchover and failover that could result in customers needing to rebuild their mirror clusters.
- Fixed an issue where transactional commands may terminate the connection in some cases.

General enhancements

- Fixed an ownership issue where the `postgis_raster` extension could not be updated correctly from a previous the PostGIS extension v2 installation.

Aurora PostgreSQL 15.10.1, December 27, 2024

Critical Priority enhancements

- Fixed an issue where the server was restarting when the connections were reset by the peer.

Aurora PostgreSQL 15.10, December 27, 2024

New features

- Optimized the minor version and patch upgrade process to reduce downtime for read replicas.

Critical stability enhancements

- Fixed an issue that in rare cases can cause CPU usage spike.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2024-10979
  - CVE-2024-10978
  - CVE-2024-10977
  - CVE-2024-10976

- Fixed an issue related to logical replication when processing large aborted transactions in the presence of catalog modifying operations. This can result in a transient failure of the logical replication process.

General enhancements

- Made multiple improvements to Aurora in-Region failover which reduces database downtime further by improving storage metadata and faster buffer cache initialization.
- Made multiple improvements to upgrades with Zero-Downtime Patching (ZDP) which reduces connection restore time and enhances ZDP resilience from failures.
- Fixed an issue where the server_id value wasn't updated after an Amazon RDS Blue/Green Deployment switchover.
- Fixed an issue that could cause database restart during hash index extension.
- Fixed an issue that would cause migration from RDS PostgreSQL to fail in the presence of nested tablespaces.
- Fixed an issue that would cause excessive engine startup times in the presence of a large number of logical replication files.
- Fixed an issue that could cause a database restart when calling functions from `aws_s3`, `aws_lambda`, and `aws_ml` extensions in the same database session as `aws_s3.table_import_from_s3()`. This fix may decrease the per-call performance of functions from the `aws_s3`, `aws_lambda`, and `aws_ml` extensions.
- Fixed an issue that could cause database restart during serverless scaling.
- Fixed an issue where AuroraForwardingReplicaReadWaitLatency and AuroraForwardingReplicaDMLLatency were reported incorrectly.
- Fixed an issue that prevented updating the pgTAP extension to version 1.3.0 or later.
- Fixed an issue in the `PostGIS` extension, which in rare cases, could cause a DB instance restart.
- Added generic `plan` informations in `aurora_stat_statements/aurora_stat_plans`.
- Fixed an issue in the `pg_repack` extension that compromises the integrity of invalid indexes.

Additional improvements and enhancements

- Updated the following extensions:
  - `pg_cron` extension to v1.6.4.

- `PostGIS` extension to version 3.4.3.
- `PROJ` library extension to version 9.5.0.
- `GEOS` library extension to verison 3.13.0.
- `orafce` extension to 4.12.0.
- `pgvector` extension to 0.7.4.
- `RDKit` extension to 2024_03_6 release (4.6).
- `pg_hint_plan` extension to version 1.5.2.

PostgreSQL 15.8 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 15.8. For more information about the improvements in PostgreSQL 15.8, see PostgreSQL release 15.8.

Releases and patches

- Aurora PostgreSQL 15.8.7, February 13, 2026
- Aurora PostgreSQL 15.8.6, November 21, 2025
- Aurora PostgreSQL 15.8.5, July 11, 2025
- Aurora PostgreSQL 15.8.4, April 17, 2025
- Aurora PostgreSQL 15.8.2, January 29, 2025
- Aurora PostgreSQL 15.8.1, January 02, 2025
- Aurora PostgreSQL 15.8, September 30, 2024

Aurora PostgreSQL 15.8.7, February 13, 2026

Critical stability enhancements

- Fixed an issue that could cause garbage collection to get blocked on a change data capture (CDC) volume.
- Fix an issue which could trigger a race in change data capture (CDC) volume expansion.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:

- CVE-2025-12817.
- CVE-2025-12818.

Aurora PostgreSQL 15.8.6, November 21, 2025

Critical stability enhancements

- Fixed an issue where minor version upgrades and patch upgrades might take a few seconds longer because the runtime process was not exiting gracefully.
- Fixed an issue related to Optimized Reads-enabled tiered cache functionality that might result in longer recovery times after a failover to Aurora replica instances.
- Fixed a security issue when altering routine ownership.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-8713.
  - CVE-2025-8714.
  - CVE-2025-8715.
- Backported fixes for the following PLv8 extension's V8 Engine security vulnerabilities:
  - CVE-2022-1364.
  - CVE-2023-3079.
- Fixed a race condition where old writer instance may not step down after a new writer instance is promoted and continues to write.

General enhancements

- Fixed an issue that could prevent online recovery of an Aurora Replica from completing.
- Fixed an issue that could cause unavailability when apg_plan_mgmt is enabled.
- Fixed an issue with parallel heap scans that could lead to index inconsistency on tables larger than 16TiB when synchronize_seqscans is enabled.
- Fixed an issue in Query Plan Management with running a utility statement immediately after installing the extension or resetting shared memory.
- Fixed an issue in enforcing, validating and evolving plans in Query Plan Management.

- Fixed an issue that could cause prolonged Serverless v2 scaling time.
- Fixed a crash that occurred when using ST_AsGeoJSON after upgrading to a release containing PostGIS 3.5.1 without running postgis_extensions_upgrade.
- Fixed an issue causing a replica restart during the replica join case.
- Fixed an issue causing query execution failure for execution plans using the "bitmap heap scan" access method.
- Fixed an issue impacting query execution performance for execution plans using the "bitmap heap scan" access method.

Aurora PostgreSQL 15.8.5, July 11, 2025

Critical stability enhancements

- Fixed an issue related to the interaction between Aurora Serverless scaling and the improved reader availability functionality that might result in longer recover times and impact availability.
- Fixed an issue in the `rds_activity_stream` extension that could cause brief periods of unavailability during configuration reloads and when maximum connections are consumed.

General enhancements

- Fixed an issue in handling of asynchronous I/O cancellation that could cause processes to become stuck indefinitely.
- Fixed an issue that causes minor version upgrades to fail with sleep/wake feature.
- Fixed an issue that can cause process stuck indefinitely at LWLock:BufferIO wait event.
- Added support of newly released Regions for the aws_s3 extension.
- Fixed an issue where unexpected internal communication channel re-establishments may cause increased latency on data processing.

Aurora PostgreSQL 15.8.4, April 17, 2025

High priority enhancements.

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-1094.

Aurora PostgreSQL 15.8.2, January 29, 2025

Critical stability enhancements.

- Fixed a security issue in the `rds_activity_stream` extension.

High priority enhancements.

- Fixed an issue in Global DB switchover and failover that could result in customers needing to rebuild their mirror clusters.
- Fixed an issue where transactional commands may terminate the connection in some cases.

General enhancements.

- Fixed an ownership issue where the postgis_raster extension could not be updated correctly from a previous the `PostGIS` extension v2 installation.

Aurora PostgreSQL 15.8.1, January 02, 2025

Critical stability enhancements

- Fixed an issue related to Query Plan Management background worker.
- Fixed a security issue in the `rds_activity_stream` extension.

High priority enhancements

- Fixed issue where Aurora in-Region failovers would result in failures in database startup.
- Fixed an issue for date functions to allow them to take into account the local/session timezone setting.
- Fixed an issue in Global DB switchover and failover that could result in customers needing to rebuild their mirror clusters.
- Fixed an issue where transactional commands may terminate the connection in some cases.
- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2024-10979.
  - CVE-2024-10978.

- CVE-2024-10976.
- CVE-2024-10977.

General enhancements

- Fixed an issue where minor version upgrades with ZDP would fail resulting in longer upgrade times.
- Made improvements to Aurora in-Region failover which reduces database downtime further with faster buffer cache initialization.
- Fixed an issue where reserved keyword “PRIMARY” caused syntax errors when used as a column name or alias in DML and DDL statements.
- Fixed an issue that could cause an error in the wal sender process when resuming logical replication.
- Fixed an ownership issue where the postgis_raster extension could not be updated correctly from a previous the `PostGIS` extension 2 installation.

Aurora PostgreSQL 15.8, September 30, 2024

New features for 15.8

- Introduced a new fast failover feature to reduce database downtime during the `planned` extension failover events with fast storage metadata initialization and fast buffer cache recovery.
- Introduced an optimization to reduce Zero Downtime Patching (ZDP) quiet point duration to 1 second.

Critical stability enhancements for 15.8

- Fixed a rare bug causing missing commit timestamps for subtransactions.

High priority enhancements for 15.8

- Fixed issues where the replication of vacuum operations may cause a restart when handling conflicts with user queries.
- Fixed an issue where deleting a large range of keys from a BTree index could cause concurrent scans to crash.

General enhancements for 15.8

- Enabled support for FIPS-validated cryptography, a fully owned AWS implementation. For more information, see AWS-LC is now FIPS 140-3 certified on AWS Security Blog.
- Improvements to database startup time during initialization and engine upgrades.
- Fixed an issue that prevented the inclusion of the `pg_bigm` extension in shared_preload_libraries.
- Fixed an issue during ZDP which causes some connections to be terminated due to long transfer time. A new ZDP metric in postgresql.log called `ZD_SOCKET_TRANSFER_CONN_DROPPED` represents these dropped connections.
- Improved reader availability for Aurora Replicas when using system administration functions.
- Fixed an in-memory two-phase commit (2PC) metadata caching issue that caused out-of-memory errors on Aurora read replicas replicating from RDS PostgreSQL source instances.
- Introduced a new function pgadmap_get_set_mapping_cmd() in the `pg_ad_mapping` extension to display commands required to recreate existing Active directory security group to Aurora PostgreSQL database role mappings.
- Fixed an issue in storage metadata initialization that can cause prolonged database startup time.
- Fixed an issue that will prevent reclaiming Aurora storage space during major version upgrade.
- Fixed an issue that prevents ZDP from completing successfully on Optimized Reads-enabled instances.

Additional improvements and enhancements for 15.8

- Updated the following extensions:
  - `pgvector` extension to version 0.7.3.
  - `mysql_fdw` extension to version REL-2_9_2.
  - `orafce` extension to version 4.10.3.
  - pgTAP extension to version 1.3.3.
  - `pg_cron` extension to version 1.6.3.
  - `RDKit` extension to version 4.5 (Release 2024_03_5).
  - `wal2json` extension to version 2.6.
  - pg_ad_mapping extension to version 1.0.
  - HypoPG extension to version 1.4.1.

PostgreSQL 15.7 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 15.7. For more information about the improvements in PostgreSQL 15.7, see PostgreSQL release 15.7.

Releases and patches

- Aurora PostgreSQL 15.7.5, July 17, 2025
- Aurora PostgreSQL 15.7.4, March 25, 2025
- Aurora PostgreSQL 15.7.3, January 29, 2025
- Aurora PostgreSQL 15.7.2, January 23, 2025
- Aurora PostgreSQL 15.7.1, September 27, 2024
- Aurora PostgreSQL 15.7, August 8, 2024

Aurora PostgreSQL 15.7.5, July 17, 2025

Critical stability enhancements

- Fixed an issue related to the interaction between Aurora Serverless scaling and the improved reader availability functionality that might result in longer recover times and impact availability.
- Fixed an issue in the rds_activity_stream extension that could cause brief periods of unavailability during configuration reloads and when maximum connections are consumed.

General enhancements

- Fixed an issue in handling of asynchronous I/O cancellation that could cause processes to become stuck indefinitely.
- Fixed an issue that causes minor version upgrades to fail with sleep/wake feature.
- Fixed an issue that can cause process stuck indefinitely at LWLock:BufferIO wait event.
- Added support of newly released Regions for the aws_s3 extension.
- Fixed an issue where unexpected internal communication channel re-establishments may cause increased latency on data processing.

Aurora PostgreSQL 15.7.4, March 25, 2025

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-1094.

Aurora PostgreSQL 15.7.3, January 29, 2025

High priority enhancements

- Fixed CVE-2020-6418 for V8 Engine in the PLV8 extension.

Aurora PostgreSQL 15.7.2, January 23, 2025

Critical stability enhancements

- Fixed an issue related to Query Plan Management background worker.

High priority enhancements

- Fixed an issue for date functions to allow them to take into account the local/session timezone setting.
- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2024-10979.
  - CVE-2024-10978.
  - CVE-2024-10976.
  - CVE-2024-10977.

General enhancements

- Fixed an issue where minor version upgrades with ZDP would fail resulting in longer upgrade times.
- Made improvements to Aurora in-Region failover which reduces database downtime further with faster buffer cache initialization.
- Fixed an issue that could cause an error in the wal sender process when resuming logical replication.

Aurora PostgreSQL 15.7.1, September 27, 2024

High priority enhancements

- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-7348

General enhancements

- Fixed an issue that would cause ZDP to fail on Aurora Optimized Reads Cache instances while upgrading into this version.

Aurora PostgreSQL 15.7, August 8, 2024

New features

- Aurora Serverless v2 now applies pending database parameter `max_connections` changes during upgrades. The Serverless V2 capacity changes result in pending `max_connections` changes. As many ZDP supported connections as allowed by `max_connections` will be preserved during upgrades.
- Introduced a feature to improve database start up time through faster buffer cache initialization during restarts and database upgrades.
- Minor version and patch upgrades may now complete faster in some cases.
- Reduced Aurora Serverless v2 scale up and scale down time in the presence of data intensive workloads or long running queries and busy or unresponsive connections.
- Added per-query memory usage information to `aurora_stat_statements` and `aurora_stat_plans`. For more information, see aurora_stat_statements.

Critical stability enhancements

- Fixed a pg_repack issue that would incorrectly allow two vacuum processes to operate concurrently on the same table.

High priority enhancements

- Fixed an issue which leads to cancellation of long-running queries on Global Database replica instances.

General enhancements

- Improved Aurora PostgreSQL performance for generative AI workloads using `pgvector`.
- Fixed cumulative statistics data reset after manual reboot.
- Fixed issue where minor version upgrades with ZDP would fail in some cases resulting in longer upgrade times.
- Improved replay performance of vacuum operations on Aurora Replica instances.
- Fixed a bug where JDBC connections may not be preserved during ZDP enabled upgrades.
- Improvement to reduce postgres private memory fragmentation.
- Fixed an issue that caused two-phase commit files to remain, preventing proper cleanup.
- Improved memory handling while processing two phase commit files.
- Fixed an issue resulting in degraded performance during query planning on Aurora replicas.
- Improved availability of Aurora read replicas.
- Fixed cumulative statistics data reset after manual reboot.
- Fixed an issue where server might restart if background worker tries to spawn parallel workers.
- Fixed an issue where the instance may restart when logically applying changes from a remote server when under resource constraints.

Additional improvements and enhancements

- Updated the following extensions:
  - `orafce` extension to version 4.9.4.
  - `pg_cron` extension to version 1.6.2.
  - `pg_partman` extension to version 5.1.0.
  - `pg_repack` extension to version 1.5.0.
  - `pg_tle` to version 1.4.0.
  - `pg_vector` extension to version 0.7.0.
  - `pgrouting` extension to version 3.6.2.

- pgTap extension to version 1.3.2.
- PostGIS extension to version 3.4.2.
- RDKit extension to version 2024_03_1.

PostgreSQL 15.6 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 15.6. For more information about the improvements in PostgreSQL 15.6, see PostgreSQL release 15.6.

Releases and patches

- Aurora PostgreSQL 15.6.6, July 28, 2025
- Aurora PostgreSQL 15.6.5, April 16, 2025
- Aurora PostgreSQL 15.6.4, February 02, 2025
- Aurora PostgreSQL 15.6.3, October 7, 2024
- Aurora PostgreSQL 15.6.2, June 20, 2024
- Aurora PostgreSQL 15.6.1, April 29, 2024

Aurora PostgreSQL 15.6.6, July 28, 2025

Critical stability enhancements.

- Fixed an issue related to the interaction between Aurora Serverless scaling and the improved reader availability functionality that might result in longer recover times and impact availability.
- Fixed an issue in the rds_activity_stream extension that could cause brief periods of unavailability during configuration reloads and when maximum connections are consumed.

General enhancements.

- Fixed an issue in handling of asynchronous I/O cancellation that could cause processes to become stuck indefinitely.
- Fixed an issue in the read replica deletion which could result in a vacuum being held back and causing eventual unavailability of database.
- Fixed an issue that can cause process stuck indefinitely at LWLock:BufferIO wait event.
- Added support of newly released Regions for the aws_s3 extension.

- Fixed an issue where unexpected internal communication channel re-establishments may cause increased latency on data processing.

Aurora PostgreSQL 15.6.5, April 16, 2025

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-1094.

Aurora PostgreSQL 15.6.4, February 02, 2025

Critical stability enhancements

- Fixed a security issue in the `rds_activity_stream` extension.

High priority enhancements

- Fixed an issue for date functions to allow them to take into account the local/session timezone setting.
- Fixed an issue in Global DB switchover and failover that can result in customers needing to rebuild their mirror clusters.
- Fixed an issue where transactional commands may terminate the connection in some cases.
- Fixed CVE-2020-6418 for V8 Engine in the PLV8 extension.
- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2024-10979
  - CVE-2024-10978
  - CVE-2024-10976
  - CVE-2024-10977
- **General enhancements**

  Fixed an ownership issue where the postgis_raster extension could not be updated correctly from a previous the `PostGIS` extension v2 installation.

Aurora PostgreSQL 15.6.3, October 7, 2024

General enhancements

- Fixed an issue that would cause ZDP to fail on Aurora Optimized Reads Cache instances while upgrading into this version.

High priority enhancements

- Fixed issues where the replication of vacuum operations may cause a restart when handling conflicts with user queries.
- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-7348

Aurora PostgreSQL 15.6.2, June 20, 2024

General enhancements

- Fixed multiple issues where minor version upgrades with ZDP would fail resulting in longer upgrade times.

High priority enhancements

- Fixed a crash with execution of pltsql user defined functions.
- Fixed an issue which led to cancellation of long-running queries on Global Database replica instances.

Critical stability enhancements

- Fixed an issue where a change in memory requirements during a minor version upgrade can cause zero-downtime patching and engine startup to fail.
- Fixed an issue with background worker where it may crash when executed in parallel worker context.
- Fixed a pg_repack issue causing two vacuums to concurrently process the same table.
- Fixed issues in how two-phase commit files are handled.

Aurora PostgreSQL 15.6.1, April 29, 2024

New features

- Added resource usage summary to pg_dump.
- Added function overloading for `aurora_stat_statements(bool showtext)` and `aurora_stat_plans(bool showtext)`.

General enhancements

- Fixed multiple minor version upgrade issues to improve connection preservation with zero-downtime patching.
- Reduced database boot time due to improved initialization time for large volumes.
- Introduced faster COPY operations by reducing contention on the relation extension lock and proactively extending relations.
- Improvements to reduce replication lag by intelligently skipping the replay of certain log records, thereby reducing the replay load.
- Fixed an issue during recovery conflict on a read node which, in rare cases, could cause brief unavailability.
- Fixed an issue where a database would fail to startup during a major version upgrade patch, in rare scenarios.
- Improved availability of read replicas by allowing recovery from replication errors in more situations.
- Fixed an issue that would cause zero-downtime patching to timeout.
- Fixed an issue resulting in a deadlock when a logical replication table synchronization operation fails.
- Fixed a logical replication decoding issue that fails to process catalog modifying changes after spilling to storage if there was a concurrent aborted sub-transaction.
- Improved log record validation before it is written to storage.
- Fixed an issue that would result in sessions incorrectly reporting ClientRead wait events after a zero-downtime patching event.
- Fixed an ambiguous function definition of aws_s3.query_export_to_s3 when upgrading the aws_s3 extension from version 1.1 to 1.2.

High priority enhancements

- Fixed an issue related to resuming a logical replication slot where, in rare cases, it could cause the slot to become stuck.
- Fixed an issue that would result in a restart when creating a database in a tablespace.
- Fixed an issue related to incorrect logical replication error handling to improve DB stability.

Critical stability enhancements

- Fixed an issue related to replication origins that in rare cases might result in longer recovery time and impact availability.
- Fixed an issue that in rare cases may cause transactions to be partially replicated by newly created logical replication slots. For more information, see Potential data loss due to race condition during logical replication slot creation.
- Fixed an issue where `pg_stat_statements` can cause zero-downtime patching to fail.
- Fixed an issue where a change in memory requirements during a minor version upgrade can cause zero-downtime patching and engine startup to fail.

Additional improvements and enhancements

- Updated the following extensions:
  - `pg_tle` extension to version 1.3.4.
  - PLV8 extension to version 3.1.10.
  - RDKit Cartridge to version Release_2023_09_4.
- New GUC Parameters has been added
  - `pgtle.clientauth_databases_to_skip`
  - `pgtle.clientauth_db_name`
  - `pgtle.clientauth_num_parallel_workers`
  - `pgtle.clientauth_users_to_skip`
  - `pgtle.enable_clientauth`
  - `pgtle.passcheck_db_name`

PostgreSQL 15.5 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 15.5. For more information about the improvements in PostgreSQL 15.5, see PostgreSQL release 15.5.

Releases and patches

- Aurora PostgreSQL 15.5.8, July 30, 2025
- Aurora PostgreSQL 15.5.7, April 22, 2025
- Aurora PostgreSQL 15.5.6, February 5, 2025
- Aurora PostgreSQL 15.5.5, September 17, 2024
- Aurora PostgreSQL 15.5.4, June 24, 2024
- Aurora PostgreSQL 15.5.3, March 13, 2024
- Aurora PostgreSQL 15.5.2, February 22, 2024
- Aurora PostgreSQL 15.5.0, December 21, 2023

Aurora PostgreSQL 15.5.8, July 30, 2025

Critical stability enhancements

- Fixed an issue related to the interaction between Auorora Serverless scaling and the improved reader availability functionality that might result in longer recover times and impact availability.
- Fixed an issue in the rds_activity_stream extension that could cause brief periods of unavailability during configuration reloads and when maximum connections are consumed.

General enhancements

- Fixed an issue in handling of asynchronous I/O cancellation that could cause processes to become stuck indefinitely.
- Fixed an issue in the read replica deletion which could result in a vaccum being held back and causing eventual unavailability of database.
- Fixed an issue that can cause process stuck indefinitely at LWLock:BufferIO wait event.
- Added support of newly released Regions for the aws_s3 extension.
- Fixed an issue where unexpected internal communication channel re-establishments may cause increased latency on data processing.

Aurora PostgreSQL 15.5.7, April 22, 2025

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-1094.

General enhancements

- Fixed an issue on the replica where a network interruption may not correctly re-establish connection with the writer.

Aurora PostgreSQL 15.5.6, February 5, 2025

Critical Priority enhancements

- Fixed a security issue in the `rds_activity_stream` extension.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2024-10979.
  - CVE-2024-10978.
  - CVE-2024-10977.
  - CVE-2024-10976.
- Fixed an issue for date functions to allow them to take into account the local/session timezone setting.
- Fixed an issue in Global DB switchover and failover that can result in customers needing to rebuild their mirror clusters.
- Fixed CVE-2020-6418 for V8 Engine in the PLV8 extension.

General enhancements

- Fixed an ownership issue where the postgis_raster extension could not be updated correctly from a previous the PostGIS extension v2 installation.

Aurora PostgreSQL 15.5.5, September 17, 2024

High priority enhancements

- Fixed issues where the replication of vacuum operations may cause a restart when handling conflicts with user queries.
- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-7348

Aurora PostgreSQL 15.5.4, June 24, 2024

General enhancements

- Fixed multiple issues where minor version upgrades with ZDP would fail resulting in longer upgrade times.

High priority enhancements

- Fixed an issue with Parallel query execution in which a backend may get into indefinite hang in certain cases.
- Fixed a crash with execution of pltsql user defined functions.
- Fixed an issue which led to cancellation of long-running queries on Global Database replica instances.

Critical stability enhancements

- Fixed an issue where a change in memory requirements during a minor version upgrade can cause zero-downtime patching and engine startup to fail.
- Fixed a pg_repack issue causing two vacuums to concurrently process the same table.

Aurora PostgreSQL 15.5.3, March 13, 2024

General enhancements

- Fixed a performance degradation issue in PLV8 extension.

Aurora PostgreSQL 15.5.2, February 22, 2024

General enhancements

- Allow `rds_superuser` to terminate backends which are not explicitly associated with a role.

High priority enhancements

- Fixed an issue where `pg_stat_statements` can block minor version upgrade during ZDP.
- Fixed an issue where a logical replication slot would no longer emit changes due to an overly strict data consistency check.
- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-0985

Critical stability enhancements

- Fixed an issue related to `apg_plan_mgmt`.
- Fixed a deadlock issue in Aurora Storage which can result in writer failover.
- Fixed an issue where active transactions during logical replication slot creation may be partially replicated by the slot.

Aurora PostgreSQL 15.5.0, December 21, 2023

Following the announcement of updates to the PostgreSQL database by the open source community, we have updated Amazon Aurora PostgreSQL-Compatible Edition to support PostgreSQL versions 15.5, 14.10, 13.13, and 12.17. These releases contain product improvements and bug fixes made by the PostgreSQL community, along with Aurora-specific improvements. New features and improvements for Babelfish for Aurora PostgreSQL version 3.4 are also included.

Refer to the Aurora version policy to help you to decide how often to upgrade and how to plan your upgrade process. As a reminder, if you are running any version of Amazon Aurora PostgreSQL version 11, you must upgrade to a newer major version by February 29, 2024.

New features

- Amazon Bedrock integration – By using the Amazon Aurora machine learning extension with your Aurora PostgreSQLDB cluster, you can now use Amazon Bedrock foundational AI models.

- Using Active Directory security groups for Aurora PostgreSQL access control – Add group role authentication support using AWS Directory Service for Microsoft Active Directory with the new `pg_ad_mapping` extension.
- Delegated Extension Support – This feature allows delegating extension management to lower privileged user with the new rds_extension role.
- Added support for `aurora_compute_plan_id` parameter which is turned on by default in an Aurora PostgreSQL DB Cluster and DB Parameter Group. For more information, see Monitoring query execution plans for Aurora PostgreSQL.
- Query Plan Management (QPM) enhancements:
  - Plan outlines will be updated to the latest format version as part of the `update_plan_hash` action for `apg_plan_mgmt.validate_plans()`.
  - Support was added for parallel append enforcement as a part of parallel query enforcement.
- Added support for the `HypoPG` extension at version 1.4.0.
- Added support for the `h3-pg` extension and the `h3-postgis` extension at version 4.1.3.

High priority enhancements

- Fixed an issue which may cause a reboot when logically replicating changes in the presence of concurrently-running DDL or canceled sub-transactions
- Fixed an issue which may cause an Aurora replica to reboot when reading a page which was modified during `WAL` replay
- Fixed an issue where if a specific volume metadata is invalid on a source cluster, it will remain invalid on a cloned cluster. Since the clone cluster uses a new volume, the metadata will now be recreated.
- Fixed a bug that may cause an engine crash during zero-downtime patching (ZDP)
- Introduced a new parameter, `rds.enable_memory_management`, which is used to enable and disable the improved memory management feature.
- Improved index scan query performance by skipping unnecessary B-tree page reads when a composite index is used with large data sets.
- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2023-5870
  - CVE-2023-5869
  - CVE-2023-5868

General enhancements

- Fixed an issue which caused the `AuroraGlobalDBRPOLag` metric to be zero when the `rds.global_db_rpo` parameter was not set.
- Fixed an issue which may cause an Aurora replica to reboot while reconnecting with the writer DB instance.
- Added support for the `rdkit.morgan_fp_size` parameter
- `rds-superuser` can now run the `pg_stat_reset_slru` function
- Fixed an issue where MultiXact SLRU accesses were not credited to the correct `pg_stat_slru` category.
- Fixed an issue which may cause unused `WAL` segements to not be properly removed
- Fixed an issue where `pglogical` does not correctly pass-through replication origin data when using the binary output format
- `rds_superuser` can now execute `ALTER COLLATION` to refresh the collation version of a locale in the catalog.
- Fixed a crash in `dblink` and `postgres_fdw` extensions due to invalid connections
- Fixed an issue where the `aws_s3` extension can import `HTTP` error responses into the table
- Fixed an issue which may cause an Aurora Replica instance with Optimized Reads to reboot while reconnecting with the writer DB instance.
- Fixed an issue which may cause an Aurora replica with Optimized Reads to reboot while caching a page to tiered cache.

Additional improvements and enhancements

- Updated the following extensions:
  - `mysql_fdw` to version 2.9.1
  - `Oracle_fdw` to version 2.6.0
  - `Orafce` to version 4.6.0
  - `pg_cron` to version 1.6.0
  - `pg_hint_plan` to version 1.5.1
  - `pg_proctab` to version 0.0.10
  - `pg_tle` to version 1.2.0
  - `plv8` to version 3.1.8

- `PostGIS` to version 3.4.0
- `prefix` to version 1.2.10
- `RDKit` to version 4.4.0 (Release_2023_09_1)

For information about extensions and modules, see Extensions supported for Aurora PostgreSQL 15.

PostgreSQL 15.4 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 15.4. For more information about the improvements in PostgreSQL 15.4, see PostgreSQL release 15.4.

Releases and patches

- Aurora PostgreSQL 15.4.11, August 5, 2025
- Aurora PostgreSQL 15.4.10, May 7, 2025
- Aurora PostgreSQL 15.4.9, February 27, 2025
- Aurora PostgreSQL 15.4.8, November 14, 2024
- Aurora PostgreSQL 15.4.7, June 25, 2024
- Aurora PostgreSQL 15.4.6, March 13, 2024
- Aurora PostgreSQL 15.4.5, Febraury 22, 2024
- Aurora PostgreSQL 15.4.3, December 15, 2023
- Aurora PostgreSQL 15.4.2, December 13, 2023
- Aurora PostgreSQL 15.4.1, November 09, 2023
- Aurora PostgreSQL 15.4.0, October 24, 2023

Aurora PostgreSQL 15.4.11, August 5, 2025

Critical stability enhancements

- Fixed an issue related to the interaction between Aurora Serverless scaling and the improved reader availability functionality that might result in longer recover times and impact availability.
- Fixed an issue in the rds_activity_stream extension that could cause brief periods of unavailability during configuration reloads and when maximum connections are consumed.

General enhancements

- Fixed an issue in the read replica deletion which could result in a vacuum being held back and causing eventual unavailability of database.
- Added support of newly released Regions for the aws_s3 extension.
- Fixed an issue where unexpected internal communication channel re-establishments may cause increased latency on data processing.

Aurora PostgreSQL 15.4.10, May 7, 2025

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-1094.

General enhancements

- Fixed an issue on the replica where a network interruption may not correctly re-establish connection with the writer.

Aurora PostgreSQL 15.4.9, February 27, 2025

Critical Priority enhancements

- Fixed a security issue in the `rds_activity_stream` extension.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2024-10979.
  - CVE-2024-10978.
  - CVE-2024-10977.
  - CVE-2024-10976.
- Fixed an issue in Global DB switchover and failover that can result in customers needing to rebuild their mirror clusters.
- Fixed CVE-2020-6418 for V8 Engine in the PLV8 extension.

General enhancements

- Fixed an ownership issue where the postgis_raster extension could not be updated correctly from a previous the PostGIS extension v2 installation.

Aurora PostgreSQL 15.4.8, November 14, 2024

High priority enhancements

- Fixed an issue that would cause a longer restart time when `rds.enable_plan_management` is turned on, but apg_plan_mgmt extension is not installed.
- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-7348

Aurora PostgreSQL 15.4.7, June 25, 2024

General enhancements

- Fixed multiple issues where minor version upgrades with ZDP would fail resulting in longer upgrade times.

High priority enhancements

- Fixed an issue which led to cancellation of long-running queries on Global Database replica instances.

Critical stability enhancements

- Fixed an issue where a change in memory requirements during a minor version upgrade can cause zero-downtime patching and engine startup to fail.
- Fixed a pg_repack issue causing two vacuums to concurrently process the same table.

Aurora PostgreSQL 15.4.6, March 13, 2024

General enhancements

- Fixed a performance degradation issue in PLV8 extension.

Aurora PostgreSQL 15.4.5, Febraury 22, 2024

General enhancements

- Allow `rds_superuser` to terminate backends which are not explicitly associated with a role.

High priority enhancements

- Fixed an issue where `pg_stat_statements` can block minor version upgrade during ZDP.
- Fixed an issue where a logical replication slot would no longer emit changes due to an overly strict data consistency check.
- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-0985

Critical stability enhancements

- Fixed an issue related to `apg_plan_mgmt`.
- Fixed a deadlock issue in Aurora Storage which can result in writer failover.
- Fixed an issue where active transactions during logical replication slot creation may be partially replicated by the slot.

Aurora PostgreSQL 15.4.3, December 15, 2023

High priority enhancements

- Fixed an issue which may cause a reboot when logically replicating changes in the presence of concurrently-running DDL or canceled sub-transactions

Aurora PostgreSQL 15.4.2, December 13, 2023

Critical stability enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2023-5870
  - CVE-2023-5869
  - CVE-2023-5868

High priority enhancements

- Improved the index scan query performance by skipping unnecessary B-tree page reads when a composite index is used with large data sets
- Fixed an issue with index scan queries that, in rare cases, could lead to database instance restarts

General stability enhancements

- Fixed an issue with logical replication actions being performed by someone other than the table owner

Aurora PostgreSQL 15.4.1, November 09, 2023

Critical stability enhancements

- Backported a fix for the following security issue:
  - CVE-2023-38545
- Fixed an issue related to `pg_cron` background worker processes

General enhancements

- Fixed an issue that could result in read replica lag due to stale metadata
- Fixed an issue related to buffer pin locking that in rare cases can result in a crash

Aurora PostgreSQL 15.4.0, October 24, 2023

New features

- Added support for `mysql_fdw` version 2.9.0
- Added support in the `aws_s3` extension for exporting to an S3 bucket encrypted with a customer managed KMS key
- Improved the availability of Aurora replicas in the global DB secondary clusters
- Added support for query plan capture on Aurora replicas
- Added support for query plan enforcement with materialize nodes
- Added support for query plan enforcement with parallel query operators

- Query plans under a given cost threshold will not be captured

High priority enhancements

- Fixed an issue which could cause the database to fail to start up during database recovery
- Included optimizations to improve the time to scale up in Aurora Serverless v2 instances

General enhancements

- Fixed an issue in the `aws_s3` extension where the number of rows exported is incorrectly reported when the total number exceeds 2 billion
- Provided options to configure timeouts in the `aws_s3` extension. By setting the following parameters (GUCs), customers will now be able to change the timeout thresholds for imports from S3:
  - `aws_s3.curlopt_low_speed_limit`
  - `aws_s3.curlopt_low_speed_time`
- Prevented instance creation failure in some edge cases
- Improved the performance of replay of commit transaction operations on Aurora replicas
- Fixed an issue where, in rare cases, an import from the `aws_s3` extension fails to complete
- Updated the GEOS library for PostGIS to version 3.12.0
- Improved Aurora Serverless v2 database memory scaling which reduces the overall database instance scale time
- Added the `WAIT_EVENT_Aurora_CLUSTER_CACHE_MANAGER_SENDER` wait event to denote wait times in the cluster cache manager sender
- Added the `WAIT_EVENT_Aurora_SERVERLESS_MONITORING_MAIN` wait event to denote wait times in Aurora Serverless resource monitoring
- Improved the handling of invalid non-persisted metadata during reads from storage on read replicas
- Fixed an issue where the database may crash during the start of a logical replication slot
- Increased the limit for `pg_cron` `cron.max_running_jobs` parameter from 100 to 1000
- The `pgAudit` `pgaudit.log_statement` parameter is now modifiable
- Fixed a bug in `CREATE TABLE` command to handle table name starting with '#' correctly.

Additional improvements and enhancements

- Updated the following extensions:
  - `orafce` to version 4.3.0
  - `pg_logical` to version 2.4.3
  - `pg_tle` to version 1.1.1
  - `pgvector` to version 0.5.0
  - `plv8` to version 3.1.6
  - `PostGIS` to version 3.3.3
  - `RDKit` to version 4.3

For information about extensions and modules, see Extensions supported for Aurora PostgreSQL 15.

PostgreSQL 15.3 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 15.3. For more information about the improvements in PostgreSQL 15.3, see PostgreSQL release 15.3.

Releases and patches

- Aurora PostgreSQL 15.3.10, August 5, 2025
- Aurora PostgreSQL 15.3.9, April 30, 2025
- Aurora PostgreSQL 15.3.8, February 24 2025
- Aurora PostgreSQL 15.3.7, November 12, 2024
- Aurora PostgreSQL 15.3.6, August 7, 2024
- Aurora PostgreSQL 15.3.5, March 13, 2024
- Aurora PostgreSQL 15.3.4, December 14, 2023
- Aurora PostgreSQL 15.3.3, November 14, 2023
- Aurora PostgreSQL 15.3.2, October 4, 2023
- Aurora PostgreSQL 15.3.0, July 13, 2023

Aurora PostgreSQL 15.3.10, August 5, 2025

Critical stability enhancements

- Fixed an issue related to the interaction between Aurora Serverless scaling and the improved reader availability functionality that might result in longer recover times and impact availability.
- Fixed an issue in the rds_activity_stream extension that could cause brief periods of unavailability during configuration reloads and when maximum connections are consumed.

General enhancements

- Added support of newly released Regions for the aws_s3 extension.
- Fixed an issue where unexpected internal communication channel re-establishments may cause increased latency on data processing.

Aurora PostgreSQL 15.3.9, April 30, 2025

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-1094.

General enhancements

- Fixed an issue on the replica where a network interruption may not correctly re-establish connection with the writer.

Aurora PostgreSQL 15.3.8, February 24 2025

Critical Priority enhancements

- Fixed a security issue in the `rds_activity_stream` extension.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2024-10979.
  - CVE-2024-10978.
  - CVE-2024-10977.
  - CVE-2024-10976.

- Fixed an issue for date functions to allow them to take into account the local/session timezone setting.
- Fixed an issue in Global DB switchover and failover that can result in customers needing to rebuild their mirror clusters.
- Fixed CVE-2020-6418 for V8 Engine in the PLV8 extension.

General enhancements

- Fixed an ownership issue where the postgis_raster extension could not be updated correctly from a previous the PostGIS extension v2 installation.

Aurora PostgreSQL 15.3.7, November 12, 2024

High priority enhancements

- Fixed an issue that would cause a longer restart time when `rds.enable_plan_management` is turned on, but apg_plan_mgmt extension is not installed.
- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-7348

Aurora PostgreSQL 15.3.6, August 7, 2024

Critical stability enhancements

- Fixed a pg_repack issue causing two vacuums to concurrently process the same table.

General enhancements

- Fixed issue where minor version upgrades with ZDP would fail resulting in longer upgrade times.

Aurora PostgreSQL 15.3.5, March 13, 2024

General enhancements

- Allow `rds_superuser` to terminate backends which are not explicitly associated with a role.

High priority enhancements

- Fixed an issue that would cause a logical replication slot to transiently error out in the presence of aborted subtransactions and DDL.
- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-0985

Critical stability enhancements

- Fixed an issue related to `apg_plan_mgmt`.
- Fixed a deadlock issue in Aurora Storage which can result in writer failover.
- Fixed an issue where active transactions during logical replication slot creation may be partially replicated by the slot.

Aurora PostgreSQL 15.3.4, December 14, 2023

Critical stability enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2023-5870
  - CVE-2023-5869
  - CVE-2023-5868

High priority enhancements

- Improved the index scan query performance by skipping unnecessary B-tree page reads when a composite index is used with large data sets
- Fixed an issue with index scan queries that, in rare cases, could lead to database instance restarts

General stability enhancements

- Fixed an issue with logical replication actions being performed by someone other than the table owner

Aurora PostgreSQL 15.3.3, November 14, 2023

Critical stability enhancements

- Backported a fix for the following security issue:
  - CVE-2023-38545
- Fixed an issue related to `pg_cron` background worker processes

General enhancements

- Fixed an issue that could result in read replica lag due to stale metadata
- Fixed an issue related to buffer pin locking that in rare cases can result in a crash

Aurora PostgreSQL 15.3.2, October 4, 2023

High priority stability enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2023-39418
  - CVE-2023-39417

High priority enhancements

- Fixed an issue which can cause a database instance to restart while executing I/O intensive read workloads
- Fixed an issue which can cause vacuum operations to become blocked after the restart of an Aurora replica
- Fixed an issue that would cause a crash when executing the `COPY FROM` command
- Fixed an issue that would cause high CPU usage and prevent new connections
- Fixed an issue where `UPDATE` and `DELETE` from a table with foreign key could fail unexpectedly with "ERROR: 40001: could not serialize access due to concurrent update when using Serializable snapshot"

General enhancements

- Introduced diagnostics for the transient metadata used for I/O

- Fixed an issue that prevented the enablement of improved memory management in certain scenarios in Aurora PostgreSQL 15.3

Aurora PostgreSQL 15.3.0, July 13, 2023

Following the announcement of updates to the PostgreSQL database by the open source community, we have updated Amazon Aurora PostgreSQL-Compatible Edition to support PostgreSQL versions 15.3, 14.8, 13.11, 12.15, and 11.20. These releases contains product improvements and bug fixes made by the PostgreSQL community, along with Aurora-specific improvements. The releases also contain new features and improvements for Babelfish for Aurora PostgreSQL version 3.2, and improved support for AWS Database Migration Service. Refer to the Amazon Aurora versions to help you to decide how often to upgrade and how to plan your upgrade process. As a reminder, if you are running any version of Amazon Aurora PostgreSQL 11, you must upgrade to a newer major version by February 29, 2024.

New features

- This release contains memory management improvements which increase database stability and availability by proactively preventing issues caused by insufficient memory. For more information, see Improved memory management in Aurora PostgreSQL.
- Added support for the `pgvector` extension version 0.4.1.

High priority enhancements

- Fixed an issue with the subtransaction metadata handling when performing a survivable reader reconnect
- Fixed an issue during ZDP which is related to the extension environment variables
- Addressed a transient error during logical replication that caused a process to incorrectly calculate that it had encountered an unexpected page
- Fixed an issue which causes a period of unavailability due to a partially created replication origin state file

General enhancements

- Addressed an issue where the computing query identifier displayed a warning, "WARNING: unrecognized node type: 378"

- Addressed an issue that caused the initial data sync of a relation to become blocked due to the premature removal of the logical replication slot on the publisher
- Added a new function, `aurora_stat_memctx_usage()`, to show backend memory use breakdown at a Postgres memory context level
- Provided options to configure the timeouts within the `aws_lambda` extension. By setting the following parameters (GUCs), customers will now be able to change the connect and request timeouts for AWS Lambda integration:
  - `aws_lambda.connect_timeout_ms`
  - `aws_lambda.request_timeout_ms`
- Fixed an issue with the calculation of the `AuroraReplicaLag` metric
- Fixed an issue where, in rare cases, the `aws_s3` extension could fail to import from an Amazon S3 bucket with a name containing dots
- Further reduced the database downtime during ZDP
- Fixed a bug which can cause unavailability during ZDP
- Fixed an issue which caused `pg_ls_waldir()` to return "ERROR: could not stat file"
- Added support for TLS 1.3 with ciphers TLS_AES_128_GCM_SHA256 and TLS_AES_256_GCM_SHA384
- Addressed an issue that blocked a major version upgrade on the Aurora replica of an RDS for PostgreSQL DB instance
- Fixed an issue that could prevent scaling in Aurora Serverless v2 instances
- Fixed an issue in logical replication which, in rare cases, can cause a period of unavailability due to the incorrect subtransaction metadata
- Fixed an issue in the `pg_vector` extension where, in rare cases, infinite or NAN values caused a crash during the index creation
- Fixed an issue to improve the performance
- Upgraded `GEOS` to version 3.11.2
- Upgraded `pg_cron` to version 1.5
- Upgraded `pg_partman` to version 4.7.3
- Upgraded `pg_tle` to version 1.0.3
- Upgraded `plv8` to version 3.1.6

PostgreSQL 15.2 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 15.2. For more information about the improvements in PostgreSQL 15.2, see PostgreSQL release 15.2.

Releases and patches

- Aurora PostgreSQL 15.2.9, November 6, 2024
- Aurora PostgreSQL 15.2.8, August 7, 2024
- Aurora PostgreSQL 15.2.7, March 13, 2024
- Aurora PostgreSQL 15.2.6, December 15, 2023
- Aurora PostgreSQL 15.2.5, November 14, 2023
- Aurora PostgreSQL 15.2.4, October 5, 2023
- Aurora PostgreSQL 15.2.3, July 25, 2023
- Aurora PostgreSQL 15.2.2, May 10, 2023
- Aurora PostgreSQL 15.2.1, April 5, 2023

Aurora PostgreSQL 15.2.9, November 6, 2024

High priority enhancements

- Fixed an issue that would cause a longer restart time when `rds.enable_plan_management` is turned on, but apg_plan_mgmt extension is not installed.
- Fixed issues where the replication of vacuum operations may cause a restart when handling conflicts with user queries.
- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-7348

Aurora PostgreSQL 15.2.8, August 7, 2024

Critical stability enhancements

- Fixed a pg_repack issue causing two vacuums to concurrently process the same table.

General enhancements

- Fixed issue where minor version upgrades with ZDP would fail resulting in longer upgrade times.

Aurora PostgreSQL 15.2.7, March 13, 2024

General enhancements

- Allow `rds_superuser` to terminate backends which are not explicitly associated with a role.

High priority enhancements

- Fixed an issue that would cause a logical replication slot to transiently error out in the presence of aborted subtransactions and DDL.
- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-0985

Critical stability enhancements

- Fixed an issue related to `apg_plan_mgmt`.
- Fixed a deadlock issue in Aurora Storage which can result in writer failover.
- Fixed an issue where active transactions during logical replication slot creation may be partially replicated by the slot.

Aurora PostgreSQL 15.2.6, December 15, 2023

Critical stability enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2023-5870
  - CVE-2023-5869
  - CVE-2023-5868

High priority enhancements

- Improved the index scan query performance by skipping unnecessary B-tree page reads when a composite index is used with large data sets
- Fixed an issue with index scan queries that, in rare cases, could lead to database instance restarts

General stability enhancements

- Fixed an issue with logical replication actions being performed by someone other than the table owner

Aurora PostgreSQL 15.2.5, November 14, 2023

Critical stability enhancements

- Backported a fix for the following security issue:
  - CVE-2023-38545
- Fixed an issue related to `pg_cron` background worker processes

General enhancements

- Fixed an issue that could result in read replica lag due to stale metadata
- Fixed an issue related to buffer pin locking that in rare cases can result in a crash

Aurora PostgreSQL 15.2.4, October 5, 2023

Critical stability enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2023-39418
  - CVE-2023-39417

High priority enhancements

- Fixed an issue which can cause a database instance to restart while executing I/O intensive read workloads

- Fixed an issue which can cause vacuum operations to become blocked after the restart of an Aurora replica
- Fixed an issue that would cause high CPU usage and prevent new connections

General enhancements

- Introduced diagnostics for the transient metadata used for I/O

Aurora PostgreSQL 15.2.3, July 25, 2023

General enhancements

- Fixed an issue related to storage space reclamation following table drop or reindex or truncate operations.
- Fixed an issue with the calculation of the `AuroraReplicaLag` metric
- Fixed a bug which can cause unavailability during ZDP
- Fixed an issue that prevented reclaiming storage on transaction commits
- Fixed an issue preventing `pglogical` from logging conflicting rows during the apply phase
- Added Aurora Serverless v2 scaling enhancements
- Fixed an issue where, in rare cases, the `aws_s3` extension could fail to import from an Amazon S3 bucket with a name containing dots
- Provided options to configure the timeouts within the `aws_lambda` extension. By setting the following parameters (GUCs), customers will now be able to change the connect and request timeouts for AWS Lambda integration:
  - `aws_lambda.connect_timeout_ms`
  - `aws_lambda.request_timeout_ms`
- Fixed multiple issues which can cause Aurora replicas with the improved read availability feature to restart when reconnecting with the writer instance
- Fixed an issue preventing a survivable reader reconnect

Aurora PostgreSQL 15.2.2, May 10, 2023

General enhancements

- Fixed an error when loading the `test_decoding` plugin in `pg_create_logical_replication_slot`
- Fixed an issue that causes logical replication to fail when using write-through cache
- Updated the Oracle client used by the `oracle_fdw` extension to version 21.9.0.0.0

Aurora PostgreSQL 15.2.1, April 5, 2023

New features

- Introduced a new Query Plan Management (QPM) plan hash calculation for multi-schema support. If users want to use QPM in multi-schema environments, they can set the `apg_plan_mgmt.plan_hash` version to 2 and call `apg_plan_mgmt.validate_plans` ('`update_plan_hash`').
- Logical replication enhancements to improve memory and CPU usage during the processing of large transactions.
- The CloudWatch metric `ReplicationSlotDiskUsage` now tracks logical replication specific storage across Aurora storage and local storage.
- Starting with Aurora PostgreSQL versions 15.2 and 14.7, a user needs to be granted the `CONNECT` privilege on each database to connect even if the user is granted access to the `rds_superuser` role. Prior to Aurora PostgreSQL versions 15.2 and 14.7, a user was able to connect to any database and system table if the user was granted the `rds_superuser` role. Previous Aurora PostgreSQL versions are not impacted by this change, and users with access to the `rds_superuser` role do not require the `CONNECT` privilege to access databases in their Aurora PostgreSQL cluster.

General enhancements

- Upgraded `PROJ` support to version 9.1.0
- Upgraded the `GDAL` library in `PostGIS` to version 3.5.3
- Upgraded the `pg_hint_plan` to version 1.5.0
- Added support for the `TCN` and `SEG` extensions

- Improved performance of deletes from b-tree and hash indexes on Aurora replicas
- Includes Aurora Serverless v2 scaling enhancements
- Fixed issue in QPM that prevented the enforcement of approved plans when joining partitioned tables
- Improved engine startup time, particularly on large instances with many objects
- The Aurora function `aurora_stat_logical_wal_cache()` is now visible to all users
- Fixed an issue in QPM that could cause unavailability when enforcing plans from prepared statements

Additional improvements and enhancements

- Updated the following extensions:
  - `apg_plan_mgmt` to version 2.4
  - `hll` to version 2.17
  - `Oracle_fdw` to version 2.5.0
  - `orafce` to version 4.0.0
  - `pg_audit` to version 1.7.0
  - `pg_cron` to version 1.4.2
  - `pg_hint_plan` to version 1.5.0
  - `pg_logical` to version 2.4.2
  - `pg_repack` to version 1.4.8
  - `pg_stat_statements` to version 1.10
  - `pg_trgm` to version 1.4
  - `pgrouting` to version 3.4.1
  - `plv8` to version 3.1.4
  - `PostGIS` to version 3.3.2
  - `rds_activity_stream` to version 1.6
  - `SEG` to version 1.0
  - `TCN` to version 1.0
  - `tds_fdw` to version 2.0.3
  - `wal2json` to version 2.5

For information about extensions and modules, see Extensions supported for Aurora PostgreSQL 15.

Differences between PostgreSQL 15 and Aurora PostgreSQL 15

Due to Aurora's unique distributed storage system, Amazon Aurora PostgreSQL version 15 does not support server-side compression with Gzip, LZ4, or Zstandard (zstd) using `pg_basebackup`, online backups using `pg_backup_start()` and `pg_backup_stop()`, and prefetching during WAL recovery. In addition, sequences can be specified as unlogged, but this has no performance improvements over normal sequences.

PostgreSQL 14 versions (includes some deprecated versions)

Version updates

- PostgreSQL 14.23
- PostgreSQL 14.22
- PostgreSQL 14.20
- PostgreSQL 14.19
- PostgreSQL 14.18
- PostgreSQL 14.17
- PostgreSQL 14.15 (Deprecated)
- PostgreSQL 14.13 (Deprecated)
- PostgreSQL 14.12 (Deprecated)
- PostgreSQL 14.11 (Deprecated)
- PostgreSQL 14.10 (Deprecated)
- PostgreSQL 14.9 (Deprecated)
- PostgreSQL 14.8 (Deprecated)
- PostgreSQL 14.7 (Deprecated)
- PostgreSQL 14.6
- PostgreSQL 14.5 (Deprecated)
- PostgreSQL 14.4 (Deprecated)
- PostgreSQL 14.3 (Deprecated)

PostgreSQL 14.23

This release of Aurora PostgreSQL is compatible with PostgreSQL 14.23. For more information about the improvements in PostgreSQL 14.23, see PostgreSQL release 14.23.

Releases and patches

- Aurora PostgreSQL 14.23.1, August 21, 2026
- Aurora PostgreSQL 14.23, August 21, 2026

Aurora PostgreSQL 14.23.1, August 21, 2026

Critical stability enhancements

- Fixed an issue in the Aurora Storage Daemon that in rare cases could impact availability.

Aurora PostgreSQL 14.23, August 21, 2026

Critical stability enhancements

- Fixed an issue that in rare cases could lead to unavailability for Aurora Replica clusters after a restart.

High priority enhancements

- Back-ported fixes for the following PostgreSQL community security issues:
  - CVE-2026-6472
  - CVE-2026-6473
  - CVE-2026-6474
  - CVE-2026-6475
  - CVE-2026-6476
  - CVE-2026-6477
  - CVE-2026-6478
  - CVE-2026-6479
  - CVE-2026-6575
  - CVE-2026-6637

  - CVE-2026-6638
- Fixed an issue that could cause upgrades to take a few seconds longer due to an unexpected termination of the logging process.
- Fixed an issue that in rare cases causes contention during extremely heavy write workloads, resulting in slower query progress and potential database unavailability.

General enhancements

- Improved Aurora storage metadata management memory usage when managing tens of millions of objects and files.
- Improved Aurora Replica availability and replay throughput by eliminating unnecessary buffer cache allocation and I/O during write-ahead-log replay for all operations.
- Fixed an issue where an internal timeout during Zero-Downtime Patching could exceed its intended duration, causing unnecessary fallback to a standard restart with longer downtime.
- Fixed a security issue in trusted PL/Perl that could allow privilege escalation.
- Fixed multiple security issues in trusted PL/Tcl that could allow code execution or cause brief periods of unavailability.
- Added a safety guard within a diagnostic logging function to prevent a crash.
- Fixed a race condition in encryption key initialization that could cause a brief period of unavailability.
- Fixed an issue where Zero-Downtime Patching (ZDP) could fall back to regular patching on inbound replicas, resulting in slightly higher downtime during maintenance operations.
- Fixed an issue with the multitransaction system that could cause database unavailability.
- Fixed an issue that can cause a database instance to restart due to a memory management issue in storage node connection handling.
- Updated the following extensions:
  - PostGIS to version 3.5.6.
  - pg_partman to version 5.4.3.
  - PgTAP to version 1.3.4.
  - pgvector to version 0.8.2.
  - PgCollection to version 1.1.1.

PostgreSQL 14.22

This release of Aurora PostgreSQL is compatible with PostgreSQL 14.22. For more information about the improvements in PostgreSQL 14.22, see PostgreSQL release 14.22.

Releases and patches

- Aurora PostgreSQL 14.22.3, July 20, 2026
- Aurora PostgreSQL 14.22.2, June 1, 2026
- Aurora PostgreSQL 14.22, April 6, 2026

Aurora PostgreSQL 14.22.3, July 20, 2026

Critical stability enhancements

- Fixed an issue that in rare cases could prevent failovers from completing to the intended failover target.
- Fixed an issue that in rare cases could lead to database unavailability for read node clusters after a restart.
- Fixed an issue with the multitransaction system that could cause database unavailability.
- Fixed an issue in Babelfish where table-valued parameters would store only the last row N times, where N is the total number of rows provided.
- Fixed an issue that improves B-tree prefetch performance when index scans were not properly utilizing prefetch buffers.

General enhancements

- Fixed an issue where GRANT SET ON PARAMETER incorrectly allowed permissions to be granted for non-existent extension parameters.
- Fixed an issue where an internal timeout during Zero-Downtime Patching could exceed its intended duration, causing unnecessary fallback to a standard restart with increased downtime.
- Fixed an issue where go-sqlcmd v1.9.0 failed to return query results.

Aurora PostgreSQL 14.22.2, June 1, 2026

Critical stability enhancements

- Fixed an issue with the multitransaction system that could cause database unavailability

High priority enhancements

- Fixed an issue with suboptimal B-tree prefetch causing increased I/O wait times.
- Back-ported fixes for the following PostgreSQL community security issues:
  - CVE-2026-6472
  - CVE-2026-6473
  - CVE-2026-6474
  - CVE-2026-6475
  - CVE-2026-6476
  - CVE-2026-6477
  - CVE-2026-6478
  - CVE-2026-6479
  - CVE-2026-6575
  - CVE-2026-6637
  - CVE-2026-6638

Aurora PostgreSQL 14.22, April 6, 2026

New features

- Enhanced Aurora patch version upgrades to minimize downtime through reliable, simplified connection transfer and accelerated connection restoration.

Critical stability enhancements

- Fixed an issue which can lead to an unnecessary storage checkpoint during database startup leading to prolonged database startup time.
- Fixed a race condition that could prevents failovers from completing to intended failover target.
- Fixed a timing condition in the aws_s3 extension which, in rare cases, can cause database unavailability.
- Fixed an issue that may cause non-failover target reader instances to restart when they attempt to connect to the new writer instance following a failover.

High priority enhancements

- Fixed an issue in cache initialization that could cause a crash during database startup..
- Fixed an issue in the Aurora Storage Daemon that could lead to brief periods of unavailability when enhanced logical replication is enabled.
- Fixed an issue in global databases planned switchover that would cause the switchover to be stuck waiting for a volume growth.
- Back-ported fixes for the following PostgreSQL community security issues:
  - CVE-2026-2003
  - CVE-2026-2004
  - CVE-2026-2005
  - CVE-2026-2006
  - CVE-2026-2007

General enhancements

- Updated the following extensions:
  - aws_s3 to version 2.0.
  - pg_bigm to version 1.2_20250903.
  - pg_hint_plan to version 1.4.4.
  - tds_fdw to version 2.0.5.
  - mysql_fdw to version REL-2_9_3.
  - pg_cron to version 1.6.7.
  - orafce to version 4.16.3.
  - hypopg to version 1.4.2.
  - pglogical to version 2.4.6.
  - pgvector to version 0.8.1.
  - pg_repack to version 1.5.3.
  - oracle_fdw to version 2.8.0.
- Fixed small memory leaks during database startup and replication.
- Fixed an issue that could cause file handles to not be properly released after upgrade.

- Fixed max_wal_size configuration to properly trigger a checkpoint if WAL produced since the prior checkpoint exceeds the parameter value.
- Improved Aurora Replica availability by reducing buffer cache contention during write-ahead-log replay.
- Fixed an issue with pg_hint_plan where session configuration parameters requiring rds_superuser permissions could not be set in hints.
- Fixed an issue in the orafce extension which, in rare cases, can cause database unavailability.
- Fixed ANALYZE operations to work correctly on tables containing large LOB data.
- Fixed an issue where optimization was not triggered due to incorrect tracking of transaction metadata.
- Fixed an issue where infinite recursion within a plv8 procedure could cause database unavailability.
- Fixed an issue where ALTER FUNCTION could fail with "routine name is not unique".

PostgreSQL 14.20

This release of Aurora PostgreSQL is compatible with PostgreSQL 14.20. For more information about the improvements in PostgreSQL 14.20, see PostgreSQL release 14.20.

Releases and patches

- Aurora PostgreSQL 14.20.5, July 20, 2026
- Aurora PostgreSQL 14.20.4, June 9, 2026
- Aurora PostgreSQL 14.20.3, May 29, 2026
- Aurora PostgreSQL 14.20.2, March 20, 2026
- Aurora PostgreSQL 14.20.1, January 16, 2026
- Aurora PostgreSQL 14.20, December, 18, 2025

Aurora PostgreSQL 14.20.5, July 20, 2026

Critical stability enhancements

- Fixed an issue that in rare cases could prevent failovers from completing to the intended failover target.

- Fixed an issue that in rare cases could lead to database unavailability for read node clusters after a restart.
- Fixed an issue in Babelfish where table-valued parameters would store only the last row N times, where N is the total number of rows provided.
- Fixed an issue that improves B-tree prefetch performance when index scans were not properly utilizing prefetch buffers.

General enhancements

- Fixed an issue where GRANT SET ON PARAMETER incorrectly allowed permissions to be granted for non-existent extension parameters.
- Fixed an issue where an internal timeout during Zero-Downtime Patching could exceed its intended duration, causing unnecessary fallback to a standard restart with increased downtime.

Aurora PostgreSQL 14.20.4, June 9, 2026

High priority enhancements

- Fixed an issue with suboptimal B-tree prefetch causing increased I/O wait times.
- Back-ported fixes for the following PostgreSQL community security issues:
  - CVE-2026-6472
  - CVE-2026-6473
  - CVE-2026-6474
  - CVE-2026-6475
  - CVE-2026-6476
  - CVE-2026-6477
  - CVE-2026-6478
  - CVE-2026-6479
  - CVE-2026-6575
  - CVE-2026-6637
  - CVE-2026-6638

Aurora PostgreSQL 14.20.3, May 29, 2026

Critical stability enhancements

- Fixed an issue where ALTER FUNCTION could fail with "routine name is not unique".

Aurora PostgreSQL 14.20.2, March 20, 2026

Critical stability enhancements

- Fixed a bug in the aws_s3 extension which, in rare circumstances, can cause database unavailability.
- Fixed an issue where read nodes may restart when attempting to connect to the new write node following a failover.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2026-2003.
  - CVE-2026-2004.
  - CVE-2026-2005.
  - CVE-2026-2006.
  - CVE-2026-2007.
  - CVE-2026-3172.
- Fixed a bug in Query Plan Management that prevented plan capture.
- Fixed a bug in the Aurora Storage Daemon that could cause database unavailability in rare cases when enhanced logical replication is enabled.
- Fixed an issue where file handlers could remain improperly allocated after a major version upgrade.
- Fixed an issue where databases could run out of memory due to excessive storage metadata in rare circumstances.
- Fixed a bug in the logging utility that could cause database unavailability due to buffer overflow in rare circumstances.
- Fixed an issue in cache initialization that could cause database unavailability during startup.

- Fixed an issue where global databases planned switchover operations could become unresponsive while waiting for storage volume growth to complete.

General enhancements

- Fixed an issue where ANALYZE operations did not work correctly on tables containing large LOB data
- Fixed an issue where correlated any transform could return an error message 'failed to build any 3-way joins' during transformation.
- Fixed an issue where optimization was not triggered due to incorrect tracking of transaction metadata.

Aurora PostgreSQL 14.20.1, January 16, 2026

Critical stability enhancements

- Fixed a timing condition in the aws_s3 extension which, in rare cases, can cause database unavailability

Aurora PostgreSQL 14.20, December, 18, 2025

New features

- Introduced a change which improves static availability of Aurora PostgreSQL writers when, in rare conditions, write operations to storage are delayed due to undergoing storage node maintenance.
- Improvements to minimize switchover downtime during Blue/Green switchover operations, by temporarily blocking transaction commit operations on the Blue environment prior to switchover, reducing drift between the Blue and Green clusters.
- Improved recovery time by optimizing commit log (clog) loading during database cold starts and unplanned restarts, with significant benefits for smaller instances with limited CPU cores.

Critical stability enhancements

- Improved cold start performance through faster cache initialization.
- Reduced memory footprint for idle connections in Serverless v2 instances.

High priority enhancements

- Back-ported fixes for the following PostgreSQL community security issues:
  - CVE-2025-12818
  - CVE-2025-12817
- Fixed a database shutdown issue that could cause major version upgrades to fail.
- Fixed a rare major version upgrade failure with large memory allocations.
- Fixed an issue preventing rds_superuser from managing prepared transactions owned by other users.

General enhancements

- Updated the following extensions:
  - h3_pg to version 4.2.3.
- Fixed a race condition in Postgres lock release with optimized read enabled.
- Improved PgAudit memory usage during parameter-heavy operations.
- Fixed database initialization failure when max_connections is set to low values.
- Improved Serverless v2 scaling performance under high CPU load.
- Improved Serverless v2 write performance.
- Fixed delays in Serverless v2 scale-down operations.
- Fixed multiple low-risk memory leaks.
- Improved database shutdown during maintenance to enhance availability.
- Improved database startup performance through optimized storage initialization.
- Fixed storage metadata initialization issue that could delay engine startup.
- Fixed region determination failures in aws_s3, aws_ml, and aws_lambda extensions.
- Fixed crash scenario when using pg_buffercache extension during Serverless v2 scaling.

PostgreSQL 14.19

This release of Aurora PostgreSQL is compatible with PostgreSQL 14.19. For more information about the improvements in PostgreSQL 14.19, see PostgreSQL release 14.19.

Releases and patches

- Aurora PostgreSQL 14.19.5, July 20, 2026
- Aurora PostgreSQL 14.19.4, June 12, 2026
- Aurora PostgreSQL 14.19.2, April 22, 2026
- Aurora PostgreSQL 14.19.1, November 25, 2025
- Aurora PostgreSQL 14.19, November 25, 2025

Aurora PostgreSQL 14.19.5, July 20, 2026

Critical stability enhancements

- Fixed an issue in Babelfish where table-valued parameters would store only the last row N times, where N is the total number of rows provided.
- Fixed an issue that improves B-tree prefetch performance when index scans were not properly utilizing prefetch buffers.

General enhancements

- Fixed an issue where GRANT SET ON PARAMETER incorrectly allowed permissions to be granted for non-existent extension parameters.

Aurora PostgreSQL 14.19.4, June 12, 2026

High priority enhancements

- Fixed an issue with suboptimal B-tree prefetch causing increased I/O wait times.
- Back-ported fixes for the following PostgreSQL community security issues:
  - CVE-2026-6472
  - CVE-2026-6473
  - CVE-2026-6474
  - CVE-2026-6475
  - CVE-2026-6476
  - CVE-2026-6477
  - CVE-2026-6478
  - CVE-2026-6479

- CVE-2026-6575
- CVE-2026-6637
- CVE-2026-6638

Aurora PostgreSQL 14.19.2, April 22, 2026

Critical stability enhancements

- Fixed a bug in the aws_s3 extension which, in rare circumstances, can cause database unavailability.
- Fixed an issue where read nodes may restart when attempting to connect to the new write node following a failover.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2026-2003.
  - CVE-2026-2004.
  - CVE-2026-2005.
  - CVE-2026-2006.
  - CVE-2026-2007.
  - CVE-2026-3172.
- Fixed a bug in Query Plan Management that prevented plan capture.
- Fixed a bug in the Aurora Storage Daemon that could cause database unavailability in rare cases when enhanced logical replication is enabled.
- Fixed an issue that can result in reader unavailability during catching up with the writer instance
- Fixed an issue where file handlers could remain improperly allocated after a major version upgrade.
- Fixed an issue where databases could run out of memory due to excessive storage metadata in rare circumstances.
- Fixed an issue in cache initialization that could cause database unavailability during startup.
- Fixed an issue where global databases planned switchover operations could become unresponsive while waiting for storage volume growth to complete.

General enhancements

- Fixed an issue where ANALYZE operations did not work correctly on tables containing large LOB data
- Fixed an issue to reduce CPU overhead while establishing Encryption in Transit between the database engine and the storage layer.
- Fixed improper handling of empty response during connection loss with storage nodes
- Fixed an issue where correlated any transform could return an error message 'failed to build any 3-way joins' during transformation.
- Fixed an issue where optimization was not triggered due to incorrect tracking of transaction metadata.
- Fixed an issue where ALTER FUNCTION could fail with "routine name is not unique".

Aurora PostgreSQL 14.19.1, November 25, 2025

Critical stability enhancements

- Fixed a database shutdown issue which could cause major version upgrade to fail.
- Fixed an Issue that could cause readers to restart or readers cannot perform read operations due to missing storage segments

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-12817
  - CVE-2025-12818
- Fixed an issue with the cleanup of files created by NOTIFY channels, which could lead to high local storage usage.

General enhancements

- Fixed an issue that could cause delays in scaling down for Serverless V2 instances.
- Fixed IMDS throttling issues by reducing IMDS requests for region related information.

Aurora PostgreSQL 14.19, November 25, 2025

New features

- Introduced a new feature to significantly reduce database downtime during restarts by initializing Aurora storage metadata in parallel and reducing contention during initialization.

Critical stability enhancements

- Fixed an issue related to Optimized Reads-enabled tiered cache functionality that might result in longer recovery times after a failover to Aurora replica instances.

High priority enhancements

- Back-ported fixes for the following PostgreSQL community security issues:
  - CVE-2025-8713
  - CVE-2025-8714
  - CVE-2025-8715
- Fixed an issue in logical replication where subscriber databases could skip replicating transactions after recovering from a crash.
- Fixed an issue which can cause vacuum operations to become blocked after the restart of an Aurora replica in a Global Database.
- Fixed a security issue when altering routine ownership.

General enhancements

- Updated the following extensions:
  - oracle_fdw to version to 2.8.0
  - pg_repack extension to version 1.5.2
  - aws_lamba extension to version 2.0
- Improved file metadata initialization times.
- Fixed an issue that caused reader instance to restart when attempting to create PostgreSQL SLRU files.
- Fixed an issue which caused prolonged Serverless v2 scaling time.
- Fixed an issue that could cause database restart during Serverless v2 scaling.

- Fixed a timing issue in replication diagnostics that could prevent accurate reporting of Aurora replica recovery status when state transitions occur in rapid succession.
- Updated the aws_lambda extension to version 2.0, which resolves a performance issue that was present in version 1.0.
- Added support to include Geodetic TIFF grid files for PROJ.
- Fixed an issue that could cause database restart during aws_s3 export.
- Addressed an issue with logging when replication slots are invalidated.
- Fixed CVE-2023-3079 for V8 Engine in the PLV8 extension.
- Fixed an issue with parallel heap scans that could lead to index inconsistency on tables larger than 16TiB when synchronize_seqscans is enabled.
- Fixed an issue where read queries may time out on Aurora replica nodes during the replay of lazy truncation triggered by vacuum on the writer node.
- Fixed a crash that occurred when using ST_AsGeoJSON after upgrading to a release containing PostGIS 3.5.1 without running postgis_extensions_upgrade.
- Fixed an issue which prevented online recovery of an Aurora Replica forcing offline recovery.

PostgreSQL 14.18

This release of Aurora PostgreSQL is compatible with PostgreSQL 14.18. For more information about the improvements in PostgreSQL 14.18, see PostgreSQL release 14.18.

Releases and patches

- Aurora PostgreSQL 14.18.6, July 29, 2026
- Aurora PostgreSQL 14.18.5, June 12, 2026
- Aurora PostgreSQL 14.18.4, January 15, 2026
- Aurora PostgreSQL 14.18.3, September 16, 2025
- Aurora PostgreSQL 14.18.2, August 8, 2025
- Aurora PostgreSQL 14.18.1, June 30, 2025
- Aurora PostgreSQL 14.18, June 30, 2025

Aurora PostgreSQL 14.18.6, July 29, 2026

Critical stability enhancements

- Fixed an issue in Babelfish where table-valued parameters would store only the last row N times, where N is the total number of rows provided.
- Fixed an issue that improves B-tree prefetch performance when index scans were not properly utilizing prefetch buffers.

General enhancements

- Fixed an issue where GRANT SET ON PARAMETER incorrectly allowed permissions to be granted for non-existent extension parameters.

Aurora PostgreSQL 14.18.5, June 12, 2026

Critical stability enhancements

- Fixed a bug in the aws_s3 extension which, in rare circumstances, can cause database unavailability.
- Fixed an issue where read nodes may restart when attempting to connect to the new write node following a failover.

High priority enhancements

- Fixed an issue with suboptimal B-tree prefetch causing increased I/O wait times.
- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2026-2003.
  - CVE-2026-2004.
  - CVE-2026-2005.
  - CVE-2026-2006.
  - CVE-2026-2007.
  - CVE-2026-3172.
  - CVE-2026-6472
  - CVE-2026-6473
  - CVE-2026-6474
  - CVE-2026-6475
  - CVE-2026-6476

- CVE-2026-6477
- CVE-2026-6478
- CVE-2026-6479
- CVE-2026-6575
- CVE-2026-6637
- CVE-2026-6638

- Fixed a bug in Query Plan Management that prevented plan capture.
- Fixed a bug in the Aurora Storage Daemon that could cause database unavailability in rare cases when enhanced logical replication is enabled.
- Fixed an issue that can result in reader crash during catching up with the writer instance.
- Fixed an issue in cache initialization that could cause database unavailability during startup.
- Fixed an issue where global databases planned switchover operations could become unresponsive while waiting for storage volume growth to complete.

Security enhancements

- Fixed a bug in the babelfish_set_role function that improved permission validation when setting roles.

General enhancements

- Fixed an issue to reduce CPU overhead while establishing Encryption in Transit between the database engine and the storage layer.
- Fixed improper handling of empty response during connection loss with storage nodes.
- Fixed an issue where correlated any transform could return an error message 'failed to build any 3-way joins' during transformation.
- Fixed an issue where ALTER FUNCTION could fail with "routine name is not unique".

Aurora PostgreSQL 14.18.4, January 15, 2026

Critical stability enhancements

- Fix an issue which could trigger a race in change data capture (CDC) volume expansion.

- Process cleanup improvements during zero downtime patching to ensure that all database processes are properly terminated, preventing shutdown stalls and improving zero downtime patching success.
- Fixed a database shutdown issue which could cause major version upgrade to fail.
- Fixed an Issue that could cause readers to restart or readers cannot perform read operations due to missing storage segments.

High priority enhancements

- Fixed an issue which could cause a restart during the start of logical replication data synchronization.
- Fixed an issue with the cleanup of files created by NOTIFY channels, which could lead to high local storage usage.
- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-12817.

    CVE-2025-12818.

General enhancements

- Fixed an issue that could cause delays in scaling down for Serverless V2 instances.
- Fixed IMDS throttling issues by reducing IMDS requests for region related information.

Aurora PostgreSQL 14.18.3, September 16, 2025

Critical stability enhancements

- Fixed an issue in engine minor and patch upgrades where in rare cases a backend can incorrectly process an interrupt early.
- Fixed an issue where minor version upgrades and patch upgrades might take a few seconds longer because the runtime process wasn't exiting gracefully.
- Fixed an issue related to Optimized Reads-enabled tiered cache functionality that might result in longer recovery times after a failover to Aurora replica instances.
- Fixed a security issue when altering routine ownership.

- Fixed an issue with Serverless v2 scaling that may cause unavailability when fetching pages from storage.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-8713.
  - CVE-2025-8714.
  - CVE-2025-8715.
- Backported fixes for the following PLv8 extension's V8 Engine security vulnerabilities:
  - CVE-2022-1364.
  - CVE-2023-3079.
- Fixed a race where old writer may not step down after a new writer is promoted and continues to write.

General enhancements

- Fixed an issue that could in certain cases prevent online recovery of an Aurora Replica from completing.
- Fixed an issue that could cause unavailability when `apg_plan_mgmt` is enabled.
- Fixed an issue with parallel heap scans that could lead to index inconsistency on tables larger than 16TiB when synchronize_seqscans is enabled.
- Fixed an issue in Query Plan Management with running a utility statement immediately after installing the extension or resetting shared memory.
- Fixed an issue with Babelfish ZDP that could lead to instance reboot after minor version ugprade in some cases.
- Fixed an issue in enforcing, validating and evolving the `plans` extension in Query Plan Management.
- Fixed an issue during numeric calculations involving aggregate functions with all-column selections.
- Fixed an issue with prolonged Serverless v2 scaling time.
- Fixed a crash that occurred when using ST_AsGeoJSON after upgrading to a release containing The `PostGIS` extension 3.5.1 without running postgis_extensions_upgrade.

- Fixed an issue causing a replica restart during the replica join case.
- Fixed an issue which can cause vacuum operations to become blocked after the restart of an Aurora replica in a Global Database.
- Fixed and issue where storage client may crash during instance restart.

Aurora PostgreSQL 14.18.2, August 8, 2025

Critical stability enhancements

- Fixed an issue which could prevent logical replication from resuming after upgrade.
- Fixed an issue with Serverless v2 scaling that may cause unavailability when performing reads from Aurora Storage.

Aurora PostgreSQL 14.18.1, June 30, 2025

High priority enhancements

- Fixed a performance issue affecting instance restart operations.

Aurora PostgreSQL 14.18, June 30, 2025

New features

- Improved Serverless v2 scaling for storage bound workloads.
- Improved Serverless v2 scaling through optimized management of memory maps.

Critical stability enhancements

- Fixed an issue where Serverless instances would fail to perform Zero Downtime Patching after automatic resume.
- Added library dependency verification during minor and patch upgrades to ensure storage metadata recovery is safe before proceeding.

High priority enhancements

- Fixed an issue in the rds_activity_stream extension that could cause brief periods of unavailability during configuration reloads.
- Fixed an issue where server will fail to start if a previous startup was prematurely terminated.

General enhancements

- Updated the following extensions:
  - apg_plan_mgmt to 2.9.
  - The `pgaudit` extension to 1.6.3.
  - The `rdkit` extension to 4.6.1 (2024_09_6).
  - The `pg_repack` extension to 1.5.1.
  - The `pglogical` extension to 2.4.5.
- Improvements to make Serverless v2 scaling more efficient on reader nodes.
- Fixed an issue that prevents Zero Downtime Patching from completing successfully on Serverless v2 auto-pause enabled instances.
- Fixed an issue in pgdam that causes the engine (with pgdam enabled) to crash when hitting maximum connections.
- Fixed an issue in the `pg_bigm` extension that can cause unavailability when the extension interacts with the GIN index.
- In Blue/Green deployments, creating or modifying temporary objects is no longer classified as restricted DDL.
- Added function aurora_stat_resource_usage() to report current CPU usage, allocated and used memory for all the backends.
- Fixed an issue which prevented Zero Downtime Patching when cache recovery is disabled.
- Fixed a synchronization issue where Zero Downtime Patching could fail due to premature engine ready state reporting.
- Fixed an issue in checkpoint replication to have storage metadata position be consistent in reader.
- Fixed an issue which causes RO node to restart while its reconnecting to RW node.
- Fixed an issue where RO client process can be stuck in LWLock:BufferIO wait event after being disconnected from the writer.
- Fixed an issue where RO node could crash when frequently falling behind RW node.

- Fixed an issue in the aws_s3 extension that could cause an import operation to restart and reinsert previously inserted rows.
- Improved performance of EXPLAIN operations for queries involving tables with many columns and complex relations.

PostgreSQL 14.17

This release of Aurora PostgreSQL is compatible with PostgreSQL 14.17. For more information about the improvements in PostgreSQL 14.17, see PostgreSQL release 14.17.

Releases and patches

- Aurora PostgreSQL 14.17.8, August 05, 2026
- Aurora PostgreSQL 14.17.7, June 26, 2026
- Aurora PostgreSQL 14.17.6, May 07, 2026
- Aurora PostgreSQL 14.17.5, February 10, 2026
- Aurora PostgreSQL 14.17.4, October 9, 2025
- Aurora PostgreSQL 14.17.3, June 3, 2025
- Aurora PostgreSQL 14.17.2, May 01, 2025
- Aurora PostgreSQL 14.17, April 07, 2025

Aurora PostgreSQL 14.17.8, August 05, 2026

Critical stability enhancements

- Fixed an issue in Babelfish where table-valued parameters would store only the last row N times, where N is the total number of rows provided.
- Fixed an issue that improves B-tree prefetch performance when index scans were not properly utilizing prefetch buffers.

General enhancements

- Fixed an issue where GRANT SET ON PARAMETER incorrectly allowed permissions to be granted for non-existent extension parameters.
- Fixed a performance issue with REINDEX operations on certain variable-size data types.

Aurora PostgreSQL 14.17.7, June 26, 2026

High priority enhancements

- Fixed an issue with suboptimal B-tree prefetch causing increased I/O wait times.
- Back-ported fixes for the following PostgreSQL community security issues:
  - CVE-2026-6472
  - CVE-2026-6473
  - CVE-2026-6474
  - CVE-2026-6475
  - CVE-2026-6476
  - CVE-2026-6477
  - CVE-2026-6478
  - CVE-2026-6479
  - CVE-2026-6575
  - CVE-2026-6637
  - CVE-2026-6638

Aurora PostgreSQL 14.17.6, May 07, 2026

Critical stability enhancements

- Fixed a bug in the aws_s3 extension which, in rare circumstances, can cause database unavailability.
- Fixed an issue where read nodes may restart when attempting to connect to the new write node following a failover.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2026-2003.
  - CVE-2026-2004.
  - CVE-2026-2005.
  - CVE-2026-2006.

- CVE-2026-2007.
- CVE-2026-3172.
- Fixed a bug in Query Plan Management that prevented plan capture.
- Fixed a bug in the Aurora Storage Daemon that could cause database unavailability in rare cases when enhanced logical replication is enabled.
- Fixed an issue that can result in reader crash during catching up with the writer instance
- Fixed an issue in cache initialization that could cause database unavailability during startup.
- Fixed an issue where global databases planned switchover operations could become unresponsive while waiting for storage volume growth to complete.

General enhancements

- Fixed an issue to reduce CPU overhead while establishing Encryption in Transit between the database engine and the storage layer.
- Fixed an issue where correlated any transform could return an error message 'failed to build any 3-way joins' during transformation.
- Fixed an issue where ALTER FUNCTION could fail with "routine name is not unique".

Aurora PostgreSQL 14.17.5, February 10, 2026

Critical stability enhancements

- Fixed an issue that could cause garbage collection to get blocked on a change data capture (CDC) volume.
- Fix an issue which could trigger a race in change data capture (CDC) volume expansion.
- Process cleanup improvements during zero downtime patching to ensure that all database processes are properly terminated, preventing shutdown stalls and improving zero downtime patching success.
- Fixed a database shutdown issue which could cause major version upgrade to fail.
- Fixed an Issue that could cause readers to restart or readers cannot perform read operations due to missing storage segments.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-12817.
  - CVE-2025-12818.
- Fixed an issue which could cause a restart during the start of logical replication data synchronization.
- Fixed an issue where premature status updates during zero downtime patching could cause unnecessary failures by ensuring proper synchronization with server startup.
- Fixed an issue with the cleanup of files created by NOTIFY channels, which could lead to high local storage usage.

General enhancements

- Fixed IMDS throttling issues by reducing IMDS requests for region related information.

Aurora PostgreSQL 14.17.4, October 9, 2025

Critical stability enhancements

- Fixed an issue in engine minor and patch upgrades where in rare cases a backend can incorrectly process an interrupt early.
- Fixed an issue where minor version upgrades and patch upgrades might take a few seconds longer because the runtime process wasn't exiting gracefully.
- Fixed an issue related to Optimized Reads-enabled tiered cache functionality that might result in longer recovery times after a failover to Aurora replica instances.
- Fixed a security issue when altering routine ownership.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-8713.
  - CVE-2025-8714.
  - CVE-2025-8715.
- Backported fixes for the following PLv8 extension's V8 Engine security vulnerabilities:
  - CVE-2022-1364.

- CVE-2023-3079.
- Fixed a race condition where old writer instance may not step down after a new writer instance is promoted and continues to write.

General enhancements

- Fixed an issue that could prevent online recovery of an Aurora Replica from completing.
- Fixed an issue that could cause unavailability when `apg_plan_mgmt` is enabled.
- Fixed an issue with parallel heap scans that could lead to index inconsistency on tables larger than 16TiB when synchronize_seqscans is enabled.
- Fixed an issue in Query Plan Management with running a utility statement immediately after installing the extension or resetting shared memory.
- Fixed an issue in enforcing, validating and evolving the `plans` extension in Query Plan Management.
- Fixed an issue during numeric calculations involving aggregate functions with all-column selections.
- Fixed an issue that could cause prolonged Serverless v2 scaling time.
- Fixed a crash that occurred when using ST_AsGeoJSON after upgrading to a release containing The `PostGIS` extension 3.5.1 without running postgis_extensions_upgrade.
- Fixed an issue causing a replica restart during the replica join case.
- Fixed an issue which can cause vacuum operations to become blocked after the restart of an Aurora replica in a Global Database.
- Fixed an issue causing query execution failure for execution the `plans` extension using the “bitmap heap scan” access method.
- Fixed an issue impacting query execution performance for execution the `plans` extension using the “bitmap heap scan” access method.
- Fixed and issue where storage client may crash during instance restart.

Aurora PostgreSQL 14.17.3, June 3, 2025

Critical stability enhancements

- Fixed an issue which can cause the database to become unresponsive when performing actions with Aurora Storage.

- Fixed an issue related to the interaction between Aurora Serverless scaling and the improved reader availability functionality that might result in longer recover times and impact availability.
- Fixed an issue in the `rds_activity_stream` extension that could cause brief periods of unavailability during configuration reloads and when maximum connections are consumed.
- Fixed an issue in handling parameter lists from previous versions of Query Plan Management.

General enhancements

- Fixed an issue in handling of asynchronous I/O cancellation that could cause processes to become stuck indefinitely.
- Fixed an issue where unexpected internal communication channel re-establishments may cause increased latency on data processing.
- Added support of newly released Regions for the aws_s3 extension.
- Fixed an issue that can cause process stuck indefinitely at LWLock:BufferIO wait event.
- Fixed an issue that can cause RO instance crash under heavy workload.
- Fixed an issue that causes minor version upgrades to fail with sleep/wake feature.

Aurora PostgreSQL 14.17.2, May 01, 2025

Critical priority enhancements

- Fixed an issue which can cause the database to become unresponsive when performing actions with Aurora storage.

Aurora PostgreSQL 14.17, April 07, 2025

New features

- Aurora Optimized Reads now enables users to resize the allocated space for Optimized Reads-enabled temporary objects on Aurora I/O-Optimized clusters using a dynamic parameter `aurora_temp_space_size`. For more information. see Aurora Optimized Reads.

Critical stability enhancements

- When the system is under critical memory pressure for an extended duration, the largest customer backend will be cancelled to prevent system from restarting due to out of memory.

High priority enhancements

- Fixed an issue where Aurora in-Region failovers would result in failures in database startup.
- Fixed a security issue in the `rds_activity_stream` extension.
- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-1094.

General enhancements

- Aurora storage metadata now initializes more quickly during unplanned failovers and server restarts, reducing overall downtime. Larger instances benefit the most by leveraging higher parallelism.
- Improved performance of file metadata operations.
- Made improvements to database downtime during a `planned` extension switchover for Global Databases.
- In Blue/Green deployments, creating or modifying temporary objects is no longer classified as restricted DDL.
  - Creating temporary objects with syntax such as CREATE TEMPORARY TABLE x AS SELECT * FROM isn't supported.
  - Creating indexes on temporary tables isn't supported.
- The Blue/Green deployment switchover won't be blocked by the `REFRESH MATERIALIZED VIEW` statement.
- Improved allocation of Write-Ahead Log (WAL) stream numbers, resulting in increased throughput for write-heavy workloads on the new Graviton 4 high-end instances.
- Fixed an issue where the query identifier (queryid) wasn't being correctly updated in pg_stat_activity when using extended protocol in pipeline mode.
- Fixed an issue where reader upgrade was taking longer than expected.
- Updated the following extensions:
  - Update the `pgvector` extension to 0.8.0.
  - Update the `pg_cron` extension to v1.6.5.
  - Update the `tds_fdw` extension to 2.0.4.
  - Update the `postgis` extension to 3.5.1.
  - Update the `pg_partman` extension to v5.2.4.

- Update the `orafce` extension to 4.14.0.
- Update the `rds_tools` extension to 1.9.
- Update the `rdkit` extension to Release_2024_09_3.

PostgreSQL 14.15 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 14.15. For more information about the improvements in PostgreSQL 14.15, see PostgreSQL release 14.15.

Releases and patches

- Aurora PostgreSQL 14.15.7, January 28, 2026
- Aurora PostgreSQL 14.15.6, November 13, 2025
- Aurora PostgreSQL 14.15.5, June 24, 2025
- Aurora PostgreSQL 14.15.4, March 24, 2025
- Aurora PostgreSQL 14.15.3, February 13, 2025
- Aurora PostgreSQL 14.15.2, January 20th, 2025
- Aurora PostgreSQL 14.15.1, December 27, 2024
- Aurora PostgreSQL 14.15, December 27, 2024

Aurora PostgreSQL 14.15.7, January 28, 2026

Critical stability enhancements

- Fixed an issue that could cause garbage collection to get blocked on a change data capture (CDC) volume.
- Fix an issue which could trigger a race in change data capture (CDC) volume expansion.
- Process cleanup improvements during zero downtime patching to ensure that all database processes are properly terminated, preventing shutdown stalls and improving zero downtime patching success.
- Fixed an Issue that could cause readers to restart or readers cannot perform read operations due to missing storage segments.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-12817.
  - CVE-2025-12818.
- Fixed an issue where premature status updates during zero downtime patching could cause unnecessary failures by ensuring proper synchronization with server startup.

General enhancements

- Fixed IMDS throttling issues by reducing IMDS requests for region related information.

Aurora PostgreSQL 14.15.6, November 13, 2025

Critical stability enhancements

- Fixed an issue in engine minor and patch upgrades where in rare cases a backend can incorrectly process an interrupt early.
- Fixed an issue where minor version upgrades and patch upgrades might take a few seconds longer because the runtime process was not exiting gracefully.
- Fixed an issue related to Optimized Reads-enabled tiered cache functionality that might result in longer recovery times after a failover to Aurora replica instances.
- Fixed a security issue when altering routine ownership.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-8713.
  - CVE-2025-8714.
  - CVE-2025-8715.
- Backported fixes for the following PLv8 extension's V8 Engine security vulnerabilities:
  - CVE-2022-1364.
  - CVE-2023-3079.
- Fixed a race condition where old writer instance may not step down after a new writer instance is promoted and continues to write.

General enhancements

- Fixed an issue that could prevent online recovery of an Aurora Replica from completing.
- Fixed an issue that could cause unavailability when apg_plan_mgmt is enabled.
- Fixed an issue with parallel heap scans that could lead to index inconsistency on tables larger than 16TiB when synchronize_seqscans is enabled.
- Fixed an issue in Query Plan Management with running a utility statement immediately after installing the extension or resetting shared memory.
- Fixed an issue in enforcing, validating and evolving plans in Query Plan Management.
- Fixed an issue that could cause prolonged Serverless v2 scaling time.
- Fixed a crash that occurred when using ST_AsGeoJSON after upgrading to a release containing PostGIS 3.5.1 without running postgis_extensions_upgrade.
- Fixed an issue causing a replica restart during the replica join case.
- Fixed an issue which can cause vacuum operations to become blocked after the restart of an Aurora replica in a Global Database.
- Fixed an issue causing query execution failure for execution plans using the "bitmap heap scan" access method.
- Fixed an issue impacting query execution performance for execution plans using the "bitmap heap scan" access method.

Aurora PostgreSQL 14.15.5, June 24, 2025

Critical stability enhancements

- Fixed an issue related to the interaction between Aurora Serverless scaling and the improved reader availability functionality that might result in longer recover times and impact availability.
- Fixed an issue in the rds_activity_stream extension that could cause brief periods of unavailability during configuration reloads and when maximum connections are consumed.

General enhancements

- Fixed an issue in handling of asynchronous I/O cancellation that could cause processes to become stuck indefinitely.
- Fixed an issue that causes minor version upgrades to fail with sleep/wake feature.

- Fixed an issue that can cause process stuck indefinitely at LWLock:BufferIO wait event.
- Added support of newly released Regions for the aws_s3 extension.
- Fixed an issue where unexpected internal communication channel re-establishments may cause increased latency on data processing.

Aurora PostgreSQL 14.15.4, March 24, 2025

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-1094.

General enhancements

- Fixed an issue on the replica where a network interruption may not correctly re-establish connection with the writer.

Aurora PostgreSQL 14.15.3, February 13, 2025

High priority enhancements

- Fixed CVE-2020-6418 for V8 Engine in the PLV8 extension.

Aurora PostgreSQL 14.15.2, January 20th, 2025

Critical Priority enhancements

- Fixed a security issue in the rds_activity_stream extension.

High priority enhancements

- Fixed an issue in Global DB switchover and failover that could result in customers needing to rebuild their mirror clusters.
- Fixed an issue where transactional commands may terminate the connection in some cases.

General enhancements

- Fixed an ownership issue where the `postgis_raster` extension could not be updated correctly from a previous the PostGIS extension v2 installation.

Aurora PostgreSQL 14.15.1, December 27, 2024

Critical Priority enhancements

- Fixed an issue where the server was restarting when the connections were reset by the peer.

Aurora PostgreSQL 14.15, December 27, 2024

New features

- Optimized the minor version and patch upgrade process to reduce downtime for read replicas.

Critical stability enhancements

- Fixed an issue that in rare cases can cause CPU usage spike.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2024-10979
  - CVE-2024-10978
  - CVE-2024-10977
  - CVE-2024-10976
- Fixed an issue related to logical replication when processing large aborted transactions in the presence of catalog modifying operations. This can result in a transient failure of the logical replication process.

General enhancements

- Made multiple improvements to Aurora in-Region failover which reduces database downtime further by improving storage metadata and faster buffer cache initialization.
- Made multiple improvements to upgrades with Zero-Downtime Patching (ZDP) which reduces connection restore time and enhances ZDP resilience from failures.

- Fixed an issue where the server_id value wasn't updated after an Amazon RDS Blue/Green Deployment switchover.
- Fixed an issue that could cause database restart during hash index extension.
- Fixed an issue that would cause migration from RDS PostgreSQL to fail in the presence of nested tablespaces.
- Fixed an issue that would cause excessive engine startup times in the presence of a large number of logical replication files.
- Fixed an issue that could cause a database restart when calling functions from `aws_s3`, `aws_lambda`, and `aws_ml` extensions in the same database session as `aws_s3.table_import_from_s3()`. This fix may decrease the per-call performance of functions from the `aws_s3`, `aws_lambda`, and `aws_ml` extensions.
- Fixed an issue that could cause database restart during serverless scaling.
- Fixed an issue where AuroraForwardingReplicaReadWaitLatency and AuroraForwardingReplicaDMLLatency were reported incorrectly.
- Fixed an issue that prevented updating the pgTAP extension to version 1.3.0 or later.
- Fixed an issue in the `PostGIS` extension, which in rare cases, could cause a DB instance restart.
- Added generic `plan` informations in `aurora_stat_statements/aurora_stat_plans`.
- Fixed an issue in the `pg_repack` extension that compromises the integrity of invalid indexes.

Additional improvements and enhancements

- Updated the following extensions:
  - `pg_cron` extension to v1.6.4.
  - `PostGIS` extension to version 3.4.3.
  - `PROJ` library extension to version 9.5.0.
  - `GEOS` library extension to verison 3.13.0.
  - `orafce` extension to 4.12.0.
  - `pgvector` extension to 0.7.4.
  - `RDKit` extension to 2024_03_6 release (4.6).
  - The `pg_hint_plan` extension to version extension 1.4.3.

PostgreSQL 14.13 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 14.13. For more information about the improvements in PostgreSQL 14.13, see PostgreSQL release 14.13.

Releases and patches

- Aurora PostgreSQL 14.13.7, February 13, 2026
- Aurora PostgreSQL 14.13.6, November 21, 2025
- Aurora PostgreSQL 14.13.5, July 11, 2025
- Aurora PostgreSQL 14.13.4, April 17, 2025
- Aurora PostgreSQL 14.13.2, January 29, 2025
- Aurora PostgreSQL 14.13.1, January 02, 2025
- Aurora PostgreSQL 14.13, September 30, 2024

Aurora PostgreSQL 14.13.7, February 13, 2026

Critical stability enhancements

- Fixed an issue that could cause garbage collection to get blocked on a change data capture (CDC) volume.
- Fix an issue which could trigger a race in change data capture (CDC) volume expansion.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-12817.
  - CVE-2025-12818.

Aurora PostgreSQL 14.13.6, November 21, 2025

Critical stability enhancements

- Fixed an issue where minor version upgrades and patch upgrades might take a few seconds longer because the runtime process was not exiting gracefully.

- Fixed an issue related to Optimized Reads-enabled tiered cache functionality that might result in longer recovery times after a failover to Aurora replica instances.
- Fixed a security issue when altering routine ownership.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-8713.
  - CVE-2025-8714.
  - CVE-2025-8715.
- Backported fixes for the following PLv8 extension's V8 Engine security vulnerabilities:
  - CVE-2022-1364.
  - CVE-2023-3079.
- Fixed a race condition where old writer instance may not step down after a new writer instance is promoted and continues to write.

General enhancements

- Fixed an issue that could prevent online recovery of an Aurora Replica from completing.
- Fixed an issue that could cause unavailability when apg_plan_mgmt is enabled.
- Fixed an issue with parallel heap scans that could lead to index inconsistency on tables larger than 16TiB when synchronize_seqscans is enabled.
- Fixed an issue in Query Plan Management with running a utility statement immediately after installing the extension or resetting shared memory.
- Fixed an issue in enforcing, validating and evolving plans in Query Plan Management.
- Fixed an issue that could cause prolonged Serverless v2 scaling time.
- Fixed a crash that occurred when using ST_AsGeoJSON after upgrading to a release containing PostGIS 3.5.1 without running postgis_extensions_upgrade.
- Fixed an issue causing a replica restart during the replica join case.
- Fixed an issue causing query execution failure for execution plans using the "bitmap heap scan" access method.
- Fixed an issue impacting query execution performance for execution plans using the "bitmap heap scan" access method.

Aurora PostgreSQL 14.13.5, July 11, 2025

Critical stability enhancements

- Fixed an issue related to the interaction between Aurora Serverless scaling and the improved reader availability functionality that might result in longer recover times and impact availability.
- Fixed an issue in the `rds_activity_stream` extension that could cause brief periods of unavailability during configuration reloads and when maximum connections are consumed.

General enhancements

- Fixed an issue in handling of asynchronous I/O cancellation that could cause processes to become stuck indefinitely.
- Fixed an issue that causes minor version upgrades to fail with sleep/wake feature.
- Fixed an issue that can cause process stuck indefinitely at LWLock:BufferIO wait event.
- Added support of newly released Regions for the aws_s3 extension.
- Fixed an issue where unexpected internal communication channel re-establishments may cause increased latency on data processing.

Aurora PostgreSQL 14.13.4, April 17, 2025

High priority enhancements.

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-1094.

Aurora PostgreSQL 14.13.2, January 29, 2025

Critical stability enhancements.

- Fixed a security issue in the `rds_activity_stream` extension.

High priority enhancements.

- Fixed an issue in Global DB switchover and failover that could result in customers needing to rebuild their mirror clusters.

- Fixed an issue where transactional commands may terminate the connection in some cases.

General enhancements.

- Fixed an ownership issue where the postgis_raster extension could not be updated correctly from a previous the `PostGIS` extension v2 installation.

Aurora PostgreSQL 14.13.1, January 02, 2025

Critical stability enhancements

- Fixed an issue related to Query Plan Management background worker.
- Fixed a security issue in the `rds_activity_stream` extension.

High priority enhancements

- Fixed issue where Aurora in-Region failovers would result in failures in database startup.
- Fixed an issue for date functions to allow them to take into account the local/session timezone setting.
- Fixed an issue in Global DB switchover and failover that could result in customers needing to rebuild their mirror clusters.
- Fixed an issue where transactional commands may terminate the connection in some cases.
- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2024-10979.
  - CVE-2024-10978.
  - CVE-2024-10976.
  - CVE-2024-10977.

General enhancements

- Fixed an issue where minor version upgrades with ZDP would fail resulting in longer upgrade times.
- Made improvements to Aurora in-Region failover which reduces database downtime further with faster buffer cache initialization.

- Fixed an issue where reserved keyword “PRIMARY” caused syntax errors when used as a column name or alias in DML and DDL statements.
- Fixed an issue that could cause an error in the wal sender process when resuming logical replication.
- Fixed an ownership issue where the postgis_raster extension could not be updated correctly from a previous the `PostGIS` extension 2 installation.

Aurora PostgreSQL 14.13, September 30, 2024

New features for 14.13

- Introduced a new fast failover feature to reduce database downtime during the `planned` extension failover events with fast storage metadata initialization and fast buffer cache recovery.
- Introduced an optimization to reduce Zero Downtime Patching (ZDP) quiet point duration to 1 second.

High priority enhancements for 14.13

- Fixed issues where the replication of vacuum operations may cause a restart when handling conflicts with user queries.
- Fixed an issue where deleting a large range of keys from a BTree index could cause concurrent scans to crash.

General enhancements for 14.13

- Enabled support for FIPS-validated cryptography, a fully owned AWS implementation. For more information, see AWS-LC is now FIPS 140-3 certified on AWS Security Blog.
- Improvements to database startup time during initialization and engine upgrades.
- Fixed an issue that prevented the inclusion of the `pg_bigm` extension in shared_preload_libraries.
- Fixed an issue during Zero Downtime Patching which causes some connections to be terminated due to long transferring time. A new ZDP metric in postgresql.log called `ZD_SOCKET_TRANSFER_CONN_DROPPED` represents these dropped connections.
- Improved reader availability for Aurora Replicas when using system administration functions.

- Fixed an in-memory two-phase commit (2PC) metadata caching issue that caused out-of-memory error on Aurora read replicas replicating from RDS PostgreSQL source instances.
- Introduced a new function pgadmap_get_set_mapping_cmd() in the `pg_ad_mapping` extension to display commands required to recreate existing Active directory security group to Aurora PostgreSQL database role mappings.
- Fixed an issue in storage metadata initialization that can cause prolonged database startup time.
- Fixed an issue that will prevent reclaiming Aurora storage space during major version upgrade.
- Fixed an issue that prevents ZDP from completing successfully on Optimized Reads-enabled instances.

Additional improvements and enhancements for 14.13

- Updated the following extensions:
  - `pgvector` extension to version 0.7.3.
  - `mysql_fdw` extension to version REL-2_9_2.
  - `orafce` extension to version 4.10.3.
  - `pgTAP` extension to version 1.3.3.
  - `pg_cron` extension to version 1.6.3.
  - `RDKit` extension to version 4.5 (Release 2024_03_5).
  - `wal2json` extension to version 2.6.
  - pg_ad_mapping extension to version 1.0.
  - `HypoPG` extension to version 1.4.1.

PostgreSQL 14.12 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 14.12. For more information about the improvements in PostgreSQL 14.12, see PostgreSQL release 14.12.

Releases and patches

- Aurora PostgreSQL 14.12.5, July 17, 2025
- Aurora PostgreSQL 14.12.4, March 25, 2025
- Aurora PostgreSQL 14.12.3, January 29, 2025
- Aurora PostgreSQL 14.12.2, January 23, 2025

- Aurora PostgreSQL 14.12.1, September 27, 2024
- Aurora PostgreSQL 14.12, August 8, 2024

Aurora PostgreSQL 14.12.5, July 17, 2025

Critical stability enhancements

- Fixed an issue related to the interaction between Aurora Serverless scaling and the improved reader availability functionality that might result in longer recover times and impact availability.
- Fixed an issue in the rds_activity_stream extension that could cause brief periods of unavailability during configuration reloads and when maximum connections are consumed.

General enhancements

- Fixed an issue in handling of asynchronous I/O cancellation that could cause processes to become stuck indefinitely.
- Fixed an issue that causes minor version upgrades to fail with sleep/wake feature.
- Fixed an issue that can cause process stuck indefinitely at LWLock:BufferIO wait event.
- Added support of newly released Regions for the aws_s3 extension.
- Fixed an issue where unexpected internal communication channel re-establishments may cause increased latency on data processing.

Aurora PostgreSQL 14.12.4, March 25, 2025

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-1094.

Aurora PostgreSQL 14.12.3, January 29, 2025

High priority enhancements

- Fixed CVE-2020-6418 for V8 Engine in the PLV8 extension.

Aurora PostgreSQL 14.12.2, January 23, 2025

Critical stability enhancements

- Fixed an issue related to Query Plan Management background worker.

High priority enhancements

- Fixed an issue in Global DB switchover and failover that could result in customers needing to rebuild their mirror clusters.
- Fixed an issue for date functions to allow them to take into account the local/session timezone setting.
- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2024-10979.
  - CVE-2024-10978.
  - CVE-2024-10976.
  - CVE-2024-10977.

General enhancements

- Fixed an issue where minor version upgrades with ZDP would fail resulting in longer upgrade times.
- Made improvements to Aurora in-Region failover which reduces database downtime further with faster buffer cache initialization.
- Fixed an issue that could cause an error in the wal sender process when resuming logical replication.

Aurora PostgreSQL 14.12.1, September 27, 2024

High priority enhancements

- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-7348

General enhancements

- Fixed an issue that would cause ZDP to fail on Aurora Optimized Reads Cache instances while upgrading into this version.

Aurora PostgreSQL 14.12, August 8, 2024

New features

- Aurora Serverless v2 now applies pending database parameter `max_connections` changes during upgrades. The Serverless V2 capacity changes result in pending `max_connections` changes. As many ZDP supported connections as allowed by `max_connections` will be preserved during upgrades.
- Introduced a feature to improve database start up time through faster buffer cache initialization during restarts and database upgrades.
- Minor version and patch upgrades may now complete faster in some cases.
- Reduced Aurora Serverless v2 scale up and scale down time in the presence of data intensive workloads or long running queries and busy or unresponsive connections.
- Added per-query memory usage information to `aurora_stat_statements` and `aurora_stat_plans`. For more information, see aurora_stat_statements.

Critical stability enhancements

- Fixed a pg_repack issue that would incorrectly allow two vacuum processes to operate concurrently on the same table.

High priority enhancements

- Fixed an issue which leads to cancellation of long-running queries on Global Database replica instances.

General enhancements

- Improved Aurora PostgreSQL performance for generative AI workloads using `pgvector`.
- Fixed issue where minor version upgrades with ZDP would fail in some cases resulting in longer upgrade times.

- Improved replay performance of vacuum operations on Aurora Replica instances.
- Fixed a bug where JDBC connections may not be preserved during ZDP enabled upgrades.
- Improvement to reduce postgres private memory fragmentation.
- Fixed an issue that caused two-phase commit files to remain, preventing proper cleanup.
- Improved memory handling while processing two phase commit files.
- Fixed an issue resulting in degraded performance during query planning on Aurora replicas.
- Improved availability of Aurora read replicas.
- Fixed an issue where server might restart if background worker tries to spawn parallel workers.
- Fixed an issue where the instance may restart when logically applying changes from a remote server when under resource constraints.

Additional improvements and enhancements

- Updated the following extensions:
  - `orafce` extension to version 4.9.4.
  - `pg_cron` extension to version 1.6.2.
  - `pg_hint_plan` extension to version 1.4.2.
  - `pg_partman` extension to version 5.1.0.
  - `pg_repack` extension to version 1.5.0.
  - `pg_tle` to version 1.4.0.
  - `pg_vector` extension to version 0.7.0.
  - `pgrouting` extension to version 3.6.2.
  - `pgTap` extension to version 1.3.2.
  - `PostGIS` extension to version 3.4.2.
  - `RDKit` extension to version 2024_03_1.

PostgreSQL 14.11 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 14.11. For more information about the improvements in PostgreSQL 14.11, see PostgreSQL release 14.11.

Releases and patches

- Aurora PostgreSQL 14.11.6, July 28, 2025
- Aurora PostgreSQL 14.11.5, April 16, 2025
- Aurora PostgreSQL 14.11.4, February 02, 2025
- Aurora PostgreSQL 14.11.3, October 7, 2024
- Aurora PostgreSQL 14.11.2, June 20, 2024
- Aurora PostgreSQL 14.11.1, April 29, 2024

Aurora PostgreSQL 14.11.6, July 28, 2025

Critical stability enhancements.

- Fixed an issue related to the interaction between Aurora Serverless scaling and the improved reader availability functionality that might result in longer recover times and impact availability.
- Fixed an issue in the `rds_activity_stream` extension that could cause brief periods of unavailability during configuration reloads and when maximum connections are consumed.

General enhancements.

- Fixed an issue in handling of asynchronous I/O cancellation that could cause processes to become stuck indefinitely.
- Fixed an issue in the read replica deletion which could result in a vacuum being held back and causing eventual unavailability of database.
- Fixed an issue that can cause process stuck indefinitely at LWLock:BufferIO wait event.
- Added support of newly released Regions for the `aws_s3` extension.
- Fixed an issue where unexpected internal communication channel re-establishments may cause increased latency on data processing.

Aurora PostgreSQL 14.11.5, April 16, 2025

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-1094.

Aurora PostgreSQL 14.11.4, February 02, 2025

Critical stability enhancements

- Fixed a security issue in the `rds_activity_stream` extension.

High priority enhancements

- Fixed an issue for date functions to allow them to take into account the local/session timezone setting.
- Fixed an issue in Global DB switchover and failover that can result in customers needing to rebuild their mirror clusters.
- Fixed an issue where transactional commands may terminate the connection in some cases.
- Fixed CVE-2020-6418 for V8 Engine in the PLV8 extension.
- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2024-10979.
  - CVE-2024-10978.
  - CVE-2024-10976.
  - CVE-2024-10977.
- **General enhancements**

  Fixed an ownership issue where the postgis_raster extension could not be updated correctly from a previous the `PostGIS` extension v2 installation.

Aurora PostgreSQL 14.11.3, October 7, 2024

General enhancements

- Fixed an issue that would cause ZDP to fail on Aurora Optimized Reads Cache instances while upgrading into this version.

High priority enhancements

- Fixed issues where the replication of vacuum operations may cause a restart when handling conflicts with user queries.
- Backported fixes for the following PostgreSQL community security issue:

- CVE-2024-7348

Aurora PostgreSQL 14.11.2, June 20, 2024

General enhancements

- Fixed multiple issues where minor version upgrades with ZDP would fail resulting in longer upgrade times.

High priority enhancements

- Fixed a crash with execution of pltsql user defined functions.
- Fixed an issue which led to cancellation of long-running queries on Global Database replica instances.

Critical stability enhancements

- Fixed an issue where a change in memory requirements during a minor version upgrade can cause zero-downtime patching and engine startup to fail.
- Fixed an issue with background worker where it may crash when executed in parallel worker context.
- Fixed a pg_repack issue causing two vacuums to concurrently process the same table.
- Fixed issues in how two-phase commit files are handled.

Aurora PostgreSQL 14.11.1, April 29, 2024

New features

- Added resource usage summary to `pg_dump`.
- Added function overloading for `aurora_stat_statements(bool showtext)` and `aurora_stat_plans(bool showtext)`.

General enhancements

- Fixed multiple minor version upgrade issues to improve connection preservation with zero-downtime patching.

- Reduced database boot time due to improved initialization time for large volumes.
- Introduced faster COPY operations by reducing contention on the relation extension lock and proactively extending relations.
- Improvements to reduce replication lag by intelligently skipping the replay of certain log records, thereby reducing the replay load.
- Fixed an issue during recovery conflict on a read node which, in rare cases, could cause brief unavailability.
- Fixed an issue where a database would fail to startup during a major version upgrade patch, in rare scenarios.
- Improved availability of read replicas by allowing recovery from replication errors in more situations.
- Fixed an issue that would cause zero-downtime patching to timeout.
- Fixed an issue resulting in a deadlock when a logical replication table synchronization operation fails.
- Fixed a logical replication decoding issue that fails to process catalog modifying changes after spilling to storage if there was a concurrent aborted sub-transaction.
- Improved log record validation before it is written to storage.
- Fixed an issue that would result in sessions incorrectly reporting ClientRead wait events after a zero-downtime patching event.
- Fixed an ambiguous function definition of aws_s3.query_export_to_s3 when upgrading the aws_s3 extension from version 1.1 to 1.2.

High priority enhancements

- Fixed an issue related to resuming a logical replication slot where, in rare cases, it could cause the slot to become stuck.
- Fixed an issue that would result in a restart when creating a database in a tablespace.
- Fixed an issue related to incorrect logical replication error handling to improve DB stability.

Critical stability enhancements

- Fixed an issue related to replication origins that in rare cases might result in longer recovery time and impact availability.

- Fixed an issue that in rare cases may cause transactions to be partially replicated by newly created logical replication slots. For more information, see Potential data loss due to race condition during logical replication slot creation.
- Fixed an issue where `pg_stat_statements` can cause zero-downtime patching to fail.
- Fixed an issue where a change in memory requirements during a minor version upgrade can cause zero-downtime patching and engine startup to fail.

Additional improvements and enhancements

- Updated the following extensions:
  - `pg_tle` extension to version 1.3.4.
  - PLV8 extension to version 3.1.10.
  - RDKit Cartridge to version Release_2023_09_4.
- New GUC Parameters has been added
  - `pgtle.clientauth_databases_to_skip`
  - `pgtle.clientauth_db_name`
  - `pgtle.clientauth_num_parallel_workers`
  - `pgtle.clientauth_users_to_skip`
  - `pgtle.enable_clientauth`
  - `pgtle.passcheck_db_name`

PostgreSQL 14.10 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 14.10. For more information about the improvements in PostgreSQL 14.10, see PostgreSQL release 14.10.

Releases and patches

- Aurora PostgreSQL 14.10.8, July 30, 2025
- Aurora PostgreSQL 14.10.7, April 22, 2025
- Aurora PostgreSQL 14.10.6, February 5, 2025
- Aurora PostgreSQL 14.10.5, September 17, 2024
- Aurora PostgreSQL 14.10.4, June 24, 2024
- Aurora PostgreSQL 14.10.3, March 13, 2024

- Aurora PostgreSQL 14.10.2, February 22, 2024
- Aurora PostgreSQL 14.10.0, December 21, 2023

Aurora PostgreSQL 14.10.8, July 30, 2025

Critical stability enhancements

- Fixed an issue related to the interaction between Aurora Serverless scaling and the improved reader availability functionality that might result in longer recover times and impact availability.
- Fixed an issue in the rds_activity_stream extension that could cause brief periods of unavailability during configuration reloads and when maximum connections are consumed.

General enhancements

- Fixed an issue in handling of asynchronous I/O cancellation that could cause processes to become stuck indefinitely.
- Fixed an issue in the read replica deletion which could result in a vaccum being held back and causing eventual unavailability of database.
- Fixed an issue that can cause process stuck indefinitely at LWLock:BufferIO wait event.
- Added support of newly released Regions for the aws_s3 extension.
- Fixed an issue where unexpected internal communication channel re-establishments may cause increased latency on data processing.

Aurora PostgreSQL 14.10.7, April 22, 2025

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-1094.

General enhancements

- Fixed an issue on the replica where a network interruption may not correctly re-establish connection with the writer.

Aurora PostgreSQL 14.10.6, February 5, 2025

Critical Priority enhancements

- Fixed a security issue in the `rds_activity_stream` extension.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2024-10979.
  - CVE-2024-10978.
  - CVE-2024-10977.
  - CVE-2024-10976.
- Fixed an issue for date functions to allow them to take into account the local/session timezone setting.
- Fixed an issue in Global DB switchover and failover that can result in customers needing to rebuild their mirror clusters.
- Fixed CVE-2020-6418 for V8 Engine in the PLV8 extension.

General enhancements

- Fixed an ownership issue where the postgis_raster extension could not be updated correctly from a previous the PostGIS extension v2 installation.

Aurora PostgreSQL 14.10.5, September 17, 2024

High priority enhancements

- Fixed an issue that would cause a longer restart time when `rds.enable_plan_management` is turned on, but apg_plan_mgmt extension is not installed.
- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-7348

Aurora PostgreSQL 14.10.4, June 24, 2024

General enhancements

- Fixed multiple issues where minor version upgrades with ZDP would fail resulting in longer upgrade times.

High priority enhancements

- Fixed an issue with Parallel query execution in which a backend may get into indefinite hang in certain cases.
- Fixed a crash with execution of pltsql user defined functions.
- Fixed an issue which led to cancellation of long-running queries on Global Database replica instances.

Critical stability enhancements

- Fixed an issue where a change in memory requirements during a minor version upgrade can cause zero-downtime patching and engine startup to fail.
- Fixed a pg_repack issue causing two vacuums to concurrently process the same table.

Aurora PostgreSQL 14.10.3, March 13, 2024

General enhancements

- Fixed a performance degradation issue in PLV8 extension.

Aurora PostgreSQL 14.10.2, February 22, 2024

General enhancements

- Allow `rds_superuser` to terminate backends which are not explicitly associated with a role.

High priority enhancements

- Fixed an issue where `pg_stat_statements` can block minor version upgrade during ZDP.

- Fixed an issue where a logical replication slot would no longer emit changes due to an overly strict data consistency check.
- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-0985

Critical stability enhancements

- Fixed an issue related to `apg_plan_mgmt`.
- Fixed a deadlock issue in Aurora Storage which can result in writer failover.
- Fixed an issue where active transactions during logical replication slot creation may be partially replicated by the slot.

Aurora PostgreSQL 14.10.0, December 21, 2023

Following the announcement of updates to the PostgreSQL database by the open source community, we have updated Amazon Aurora PostgreSQL-Compatible Edition to support PostgreSQL versions 15.5, 14.10, 13.13, and 12.17. These releases contain product improvements and bug fixes made by the PostgreSQL community, along with Aurora-specific improvements. New features and improvements for Babelfish for Aurora PostgreSQL version 3.4 are also included.

Refer to the Aurora version policy to help you to decide how often to upgrade and how to plan your upgrade process. As a reminder, if you are running any version of Amazon Aurora PostgreSQL version 11, you must upgrade to a newer major version by February 29, 2024.

New features

- Amazon Bedrock integration – By using the Amazon Aurora machine learning extension with your Aurora PostgreSQLDB cluster, you can now use Amazon Bedrock foundational AI models.
- Using Active Directory security groups for Aurora PostgreSQL access control – Add group role authentication support using AWS Directory Service for Microsoft Active Directory with the new `pg_ad_mapping` extension.
- Delegated Extension Support – This feature allows delegating extension management to lower privileged user with the new rds_extension role.
- Added support for `aurora_compute_plan_id` parameter which is turned on by default in an Aurora PostgreSQL DB Cluster and DB Parameter Group. For more information, see Monitoring query execution plans for Aurora PostgreSQL.

- Query Plan Management (QPM) enhancements:
  - Plan outlines will be updated to the latest format version as part of the `update_plan_hash` action for `apg_plan_mgmt.validate_plans()`.
  - Support was added for parallel append enforcement as a part of parallel query enforcement.
- Added support for the HypoPG extension at version 1.4.0.
- Added support for the `h3-pg` extension and the `h3-postgis` extension at version 4.1.3.

High priority enhancements

- Fixed an issue which may cause a reboot when logically replicating changes in the presence of concurrently-running DDL or canceled sub-transactions
- Fixed an issue which may cause an Aurora replica to reboot when reading a page which was modified during WAL replay
- Fixed an issue where if a specific volume metadata is invalid on a source cluster, it will remain invalid on a cloned cluster. Since the clone cluster uses a new volume, the metadata will now be recreated.
- Fixed a bug that may cause an engine crash during zero-downtime patching (ZDP)
- Introduced a new parameter, `rds.enable_memory_management`, which is used to enable and disable the improved memory management feature.
- Improved index scan query performance by skipping unnecessary B-tree page reads when a composite index is used with large data sets.
- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2023-5870
  - CVE-2023-5869
  - CVE-2023-5868

General enhancements

- Fixed an issue which may cause an Aurora replica to reboot while reconnecting with the writer DB instance.
- Added support for the `rdkit.morgan_fp_size` parameter
- `rds-superuser` can now run the `pg_stat_reset_slru` function

- Fixed an issue where MultiXact SLRU accesses were not credited to the correct `pg_stat_slru` category.
- Fixed an issue which may cause unused `WAL` segements to not be properly removed
- Fixed an issue where `pglogical` does not correctly pass-through replication origin data when using the binary output format
- `rds_superuser` can now execute `ALTER COLLATION` to refresh the collation version of a locale in the catalog.
- Fixed a crash in `dblink` and `postgres_fdw` extensions due to invalid connections
- Fixed an issue where the `aws_s3` extension can import `HTTP` error responses into the table
- Fixed an issue which may cause an Aurora Replica instance with Optimized Reads to reboot while reconnecting with the writer DB instance.
- Fixed an issue which may cause an Aurora replica with Optimized Reads to reboot while caching a page to tiered cache.
- Record the version of the AWS independent default collation library version in `pg_collation catalog`.

Additional improvements and enhancements

- Updated the following extensions:
  - `mysql_fdw` to version 2.9.1
  - `Oracle_fdw` to version 2.6.0
  - `Orafce` to version 4.6.0
  - `pg_cron` to version 1.6.0
  - `pg_proctab` to version 0.0.10
  - `pg_tle` to version 1.2.0
  - `plv8` to version 3.1.8
  - `PostGIS` to version 3.4.0
  - `prefix` to version 1.2.10
  - `RDKit` to version 4.4.0 (Release_2023_09_1)

For information about extensions and modules, see Extensions supported for Aurora PostgreSQL 14.

PostgreSQL 14.9 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 14.9. For more information about the improvements in PostgreSQL 14.9, see PostgreSQL release 14.9.

Releases and patches

- Aurora PostgreSQL 14.9.11, August 5, 2025
- Aurora PostgreSQL 14.9.10, May 7, 2025
- Aurora PostgreSQL 14.9.9, February 27, 2025
- Aurora PostgreSQL 14.9.8, November 14, 2024
- Aurora PostgreSQL 14.9.7, June 25, 2024
- Aurora PostgreSQL 14.9.6, March 13, 2024
- Aurora PostgreSQL 14.9.5, February 22, 2024
- Aurora PostgreSQL 14.9.3, December 15, 2023
- Aurora PostgreSQL 14.9.2, December 13, 2023
- Aurora PostgreSQL 14.9.1, November 09, 2023
- Aurora PostgreSQL 14.9.0, October 24, 2023

Aurora PostgreSQL 14.9.11, August 5, 2025

Critical stability enhancements

- Fixed an issue related to the interaction between Aurora Serverless scaling and the improved reader availability functionality that might result in longer recover times and impact availability.
- Fixed an issue in the rds_activity_stream extension that could cause brief periods of unavailability during configuration reloads and when maximum connections are consumed.

General enhancements

- Fixed an issue in the read replica deletion which could result in a vacuum being held back and causing eventual unavailability of database.
- Added support of newly released Regions for the aws_s3 extension.
- Fixed an issue where unexpected internal communication channel re-establishments may cause increased latency on data processing.

Aurora PostgreSQL 14.9.10, May 7, 2025

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-1094.

General enhancements

- Fixed an issue on the replica where a network interruption may not correctly re-establish connection with the writer.

Aurora PostgreSQL 14.9.9, February 27, 2025

Critical Priority enhancements

- Fixed a security issue in the `rds_activity_stream` extension.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2024-10979.
  - CVE-2024-10978.
  - CVE-2024-10977.
  - CVE-2024-10976.
- Fixed an issue in Global DB switchover and failover that can result in customers needing to rebuild their mirror clusters.
- Fixed CVE-2020-6418 for V8 Engine in the PLV8 extension.

General enhancements

- Fixed an ownership issue where the postgis_raster extension could not be updated correctly from a previous the PostGIS extension v2 installation.

Aurora PostgreSQL 14.9.8, November 14, 2024

High priority enhancements

- Fixed an issue that would cause a longer restart time when `rds.enable_plan_management` is turned on, but apg_plan_mgmt extension is not installed.
- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-7348

Aurora PostgreSQL 14.9.7, June 25, 2024

General enhancements

- Fixed multiple issues where minor version upgrades with ZDP would fail resulting in longer upgrade times.

High priority enhancements

- Fixed an issue which led to cancellation of long-running queries on Global Database replica instances.

Critical stability enhancements

- Fixed an issue where a change in memory requirements during a minor version upgrade can cause zero-downtime patching and engine startup to fail.
- Fixed a pg_repack issue causing two vacuums to concurrently process the same table.

Aurora PostgreSQL 14.9.6, March 13, 2024

General enhancements

- Fixed a performance degradation issue in PLV8 extension.

Aurora PostgreSQL 14.9.5, February 22, 2024

General enhancements

- Allow `rds_superuser` to terminate backends which are not explicitly associated with a role.

High priority enhancements

- Fixed an issue where `pg_stat_statements` can block minor version upgrade during ZDP.
- Fixed an issue where a logical replication slot would no longer emit changes due to an overly strict data consistency check.
- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-0985

Critical stability enhancements

- Fixed an issue related to `apg_plan_mgmt`.
- Fixed a deadlock issue in Aurora Storage which can result in writer failover.
- Fixed an issue where active transactions during logical replication slot creation may be partially replicated by the slot.

Aurora PostgreSQL 14.9.3, December 15, 2023

High priority enhancements

- Fixed an issue which may cause a reboot when logically replicating changes in the presence of concurrent canceled subtransactions and DDL

Aurora PostgreSQL 14.9.2, December 13, 2023

Critical stability enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2023-5870
  - CVE-2023-5869
  - CVE-2023-5868

High priority enhancements

- Improved the index scan query performance by skipping unnecessary B-tree page reads when a composite index is used with large data sets
- Fixed an issue with index scan queries that, in rare cases, could lead to database instance restarts

General stability enhancements

- Fixed an issue with logical replication actions being performed by someone other than the table owner

Aurora PostgreSQL 14.9.1, November 09, 2023

Critical stability enhancements

- Backported a fix for the following security issue:
  - CVE-2023-38545
- Fixed an issue related to `pg_cron` background worker processes

General enhancements

- Fixed an issue related to buffer pin locking that in rare cases can result in a crash

Aurora PostgreSQL 14.9.0, October 24, 2023

New features

- Added support for `mysql_fdw` version 2.9.0
- Added support in the `aws_s3` extension for exporting to an S3 bucket encrypted with a customer managed KMS key
- Improved the availability of Aurora replicas in the global DB secondary clusters
- Added support for query plan capture on Aurora replicas
- Added support for query plan enforcement with materialize nodes
- Added support for query plan enforcement with parallel query operators
- Allowed query plans under a given cost threshold to not be captured

High priority enhancements

- Included optimizations to improve the time to scale up in Aurora Serverless instances

General enhancements

- Fixed an issue in the aws_s3 extension where the number of rows exported is incorrectly reported when the total number exceeds 2 billion
- Provided options to configure timeouts in the aws_s3 extension. By setting the following parameters (GUCs), customers will now be able to change the timeout thresholds for imports from S3:
  - aws_s3.curlopt_low_speed_limit
  - aws_s3.curlopt_low_speed_time
- Prevented instance creation failure in some edge cases
- Improved the performance of replay of commit transaction operations on Aurora replicas
- Fixed an issue where, in rare cases, an import from the aws_s3 extension fails to complete
- Updated the GEOS library for PostGIS to version 3.12.0
- Improved Aurora Serverless v2 database memory scaling which reduces the overall database instance scale time
- Added the WAIT_EVENT_Aurora_CLUSTER_CACHE_MANAGER_SENDER wait event to denote wait times in the cluster cache manager sender
- Added the WAIT_EVENT_Aurora_SERVERLESS_MONITORING_MAIN wait event to denote wait times in Aurora Serverless resource monitoring
- Improved the handling of invalid non-persisted metadata during reads from storage on read replicas
- Fixed an issue where the database may crash during the start of a logical replication slot
- Increased the limit for pg_cron cron.max_running_jobs parameter from 100 to 1000
- The pgAudit pgaudit.log_statement parameter is now modifiable
- Introduced diagnostics for transient metadata used for I/O
- Fixed a bug in CREATE TABLE command to handle table name starting with '#' correctly

Additional improvements and enhancements

- Updated the following extensions:
  - `orafce` to version 4.3.0
  - `pg_logical` to version 2.4.3
  - `pg_tle` to version 1.1.1
  - `pgvector` to version 0.5.0
  - `PostGIS` to version 3.3.3
  - `RDKit` to version 4.3

For information about extensions and modules, see Extensions supported for Aurora PostgreSQL 14.

PostgreSQL 14.8 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 14.8. For more information about the improvements in PostgreSQL 14.8, see PostgreSQL release 14.8.

Releases and patches

- Aurora PostgreSQL 14.8.10, August 5, 2025
- Aurora PostgreSQL 14.8.9, April 30, 2025
- Aurora PostgreSQL 14.8.8, February 24 2025
- Aurora PostgreSQL 14.8.7, November 12, 2024
- Aurora PostgreSQL 14.8.6, August 7, 2024
- Aurora PostgreSQL 14.8.5, March 13, 2024
- Aurora PostgreSQL 14.8.4, December 14, 2023
- Aurora PostgreSQL 14.8.3, November 14, 2023
- Aurora PostgreSQL 14.8.2, October 4, 2023
- Aurora PostgreSQL 14.8.0, July 13, 2023

Aurora PostgreSQL 14.8.10, August 5, 2025

Critical stability enhancements

- Fixed an issue related to the interaction between Aurora Serverless scaling and the improved reader availability functionality that might result in longer recover times and impact availability.
- Fixed an issue in the rds_activity_stream extension that could cause brief periods of unavailability during configuration reloads and when maximum connections are consumed.

General enhancements

- Added support of newly released Regions for the aws_s3 extension.
- Fixed an issue where unexpected internal communication channel re-establishments may cause increased latency on data processing.

Aurora PostgreSQL 14.8.9, April 30, 2025

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-1094.

General enhancements

- Fixed an issue on the replica where a network interruption may not correctly re-establish connection with the writer.

Aurora PostgreSQL 14.8.8, February 24 2025

Critical Priority enhancements

- Fixed a security issue in the rds_activity_stream extension.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2024-10979.
  - CVE-2024-10978.
  - CVE-2024-10977.
  - CVE-2024-10976.

- Fixed an issue for date functions to allow them to take into account the local/session timezone setting.
- Fixed an issue in Global DB switchover and failover that can result in customers needing to rebuild their mirror clusters.
- Fixed CVE-2020-6418 for V8 Engine in the PLV8 extension.

General enhancements

- Fixed an ownership issue where the postgis_raster extension could not be updated correctly from a previous the PostGIS extension v2 installation.

Aurora PostgreSQL 14.8.7, November 12, 2024

High priority enhancements

- Fixed an issue that would cause a longer restart time when `rds.enable_plan_management` is turned on, but apg_plan_mgmt extension is not installed.
- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-7348

Aurora PostgreSQL 14.8.6, August 7, 2024

Critical stability enhancements

- Fixed a pg_repack issue causing two vacuums to concurrently process the same table.

General enhancements

- Fixed issue where minor version upgrades with ZDP would fail resulting in longer upgrade times.

Aurora PostgreSQL 14.8.5, March 13, 2024

General enhancements

- Allow `rds_superuser` to terminate backends which are not explicitly associated with a role.

High priority enhancements

- Fixed an issue that would cause a logical replication slot to transiently error out in the presence of aborted subtransactions and DDL.
- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-0985

Critical stability enhancements

- Fixed an issue related to `apg_plan_mgmt`.
- Fixed a deadlock issue in Aurora Storage which can result in writer failover.
- Fixed an issue where active transactions during logical replication slot creation may be partially replicated by the slot.

Aurora PostgreSQL 14.8.4, December 14, 2023

Critical stability enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2023-5870
  - CVE-2023-5869
  - CVE-2023-5868

High priority enhancements

- Improved the index scan query performance by skipping unnecessary B-tree page reads when a composite index is used with large data sets
- Fixed an issue with index scan queries that, in rare cases, could lead to database instance restarts

General stability enhancements

- Fixed an issue with logical replication actions being performed by someone other than the table owner

Aurora PostgreSQL 14.8.3, November 14, 2023

Critical stability enhancements

- Backported a fix for the following security issue:
  - CVE-2023-38545
- Fixed an issue related to `pg_cron` background worker processes

General enhancements

- Fixed an issue that could result in read replica lag due to stale metadata
- Fixed an issue related to buffer pin locking that in rare cases can result in a crash

Aurora PostgreSQL 14.8.2, October 4, 2023

Critical stability enhancements

- Backported a fix for the following PostgreSQL community security issue:
  - CVE-2023-39417

High priority enhancements

- Fixed an issue which can cause a database instance to restart while executing I/O intensive read workloads
- Fixed an issue which can cause vacuum operations to become blocked after the restart of an Aurora replica
- Fixed an issue that would cause a crash when executing the `COPY FROM` command
- Fixed an issue that would cause high CPU usage and prevent new connections
- Fixed an issue where `UPDATE` and `DELETE` from a table with foreign key could fail unexpectedly with "ERROR: 40001: could not serialize access due to concurrent update when using Serializable snapshot"

General enhancements

- Introduced diagnostics for the transient metadata used for I/O

- Fixed an issue that prevented the enablement of improved memory management in certain scenarios in Aurora PostgreSQL 15.3

Aurora PostgreSQL 14.8.0, July 13, 2023

Following the announcement of updates to the PostgreSQL database by the open source community, we have updated Amazon Aurora PostgreSQL-Compatible Edition to support PostgreSQL versions 15.3, 14.8, 13.11, 12.15, and 11.20. These releases contains product improvements and bug fixes made by the PostgreSQL community, along with Aurora-specific improvements. The releases also contain new features and improvements for Babelfish for Aurora PostgreSQL version 3.2, and improved support for AWS Database Migration Service. Refer to the Amazon Aurora versions to help you to decide how often to upgrade and how to plan your upgrade process. As a reminder, if you are running any version of Amazon Aurora PostgreSQL 11, you must upgrade to a newer major version by February 29, 2024.

New features

- This release contains memory management improvements which increase database stability and availability by proactively preventing issues caused by insufficient memory. For more information, see Improved memory management in Aurora PostgreSQL.
- Added support for `pgvector` extension version 0.4.1

High priority enhancements

- Fixed an issue with the subtransaction metadata handling when performing a survivable reader reconnect
- Fixed an issue during ZDP which is related to the extension environment variables
- Addressed a transient error during logical replication that caused a process to incorrectly calculate that it had encountered an unexpected page
- Fixed an issue which causes a period of unavailability due to a partially created replication origin state file

General enhancements

- Addressed an issue where the computing query identifier displayed a warning, "WARNING: unrecognized node type: 378"

- Addressed an issue that caused the initial data sync of a relation to become blocked due to the premature removal of the logical replication slot on the publisher
- Added a new function, `aurora_stat_memctx_usage()`, to show backend memory use breakdown at a Postgres memory context level
- Provided options to configure the timeouts within the `aws_lambda` extension. By setting the following parameters (GUCs), customers will now be able to change the connect and request timeouts for AWS Lambda integration:
  - `aws_lambda.connect_timeout_ms`
  - `aws_lambda.request_timeout_ms`
- Fixed an issue with the calculation of the `AuroraReplicaLag` metric
- Fixed an issue where, in rare cases, the `aws_s3` extension could fail to import from an Amazon S3 bucket with a name containing dots
- Further reduced the database downtime during ZDP
- Fixed a bug which can cause unavailability during ZDP
- Fixed an issue which caused `pg_ls_waldir()` to return "ERROR: could not stat file"
- Added support for TLS 1.3 with ciphers TLS_AES_128_GCM_SHA256 and TLS_AES_256_GCM_SHA384
- Addressed an issue that blocked a major version upgrade on the Aurora replica of an RDS for PostgreSQL DB instance
- Fixed an issue that could prevent scaling in Aurora Serverless v2 instances
- Fixed an issue in logical replication which, in rare cases, can cause a period of unavailability due to the incorrect subtransaction metadata
- Fixed an issue in the `pg_vector` extension where, in rare cases, infinite or NAN values caused a crash during the index creation
- Upgraded `GEOS` to version 3.11.2
- Upgraded `pg_cron` to version 1.5
- Upgraded `pg_partman` to version 4.7.3
- Upgraded `pg_tle` to version 1.0.3
- Upgraded `plv8` to version 3.1.6
- Upgraded `tds_fdw` to 2.0.3

PostgreSQL 14.7 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 14.7. For more information about the improvements in PostgreSQL 14.7, see PostgreSQL release 14.7.

Releases and patches

- Aurora PostgreSQL 14.7.9, November 6, 2024
- Aurora PostgreSQL 14.7.8, August 7, 2024
- Aurora PostgreSQL 14.7.7, March 13, 2024
- Aurora PostgreSQL 14.7.6, December 15, 2023
- Aurora PostgreSQL 14.7.5, November 14, 2023
- Aurora PostgreSQL 14.7.4, October 5, 2023
- Aurora PostgreSQL 14.7.3, July 24, 2023
- Aurora PostgreSQL 14.7.2, May 10, 2023
- Aurora PostgreSQL 14.7.1, April 5, 2023

Aurora PostgreSQL 14.7.9, November 6, 2024

High priority enhancements

- Fixed an issue that would cause a longer restart time when `rds.enable_plan_management` is turned on, but apg_plan_mgmt extension is not installed.
- Fixed issues where the replication of vacuum operations may cause a restart when handling conflicts with user queries.
- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-7348

Aurora PostgreSQL 14.7.8, August 7, 2024

Critical stability enhancements

- Fixed a pg_repack issue causing two vacuums to concurrently process the same table.

General enhancements

- Fixed issue where minor version upgrades with ZDP would fail resulting in longer upgrade times.

Aurora PostgreSQL 14.7.7, March 13, 2024

General enhancements

- Allow `rds_superuser` to terminate backends which are not explicitly associated with a role.

High priority enhancements

- Fixed an issue that would cause a logical replication slot to transiently error out in the presence of aborted subtransactions and DDL.
- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-0985

Critical stability enhancements

- Fixed an issue related to `apg_plan_mgmt`.
- Fixed a deadlock issue in Aurora Storage which can result in writer failover.
- Fixed an issue where active transactions during logical replication slot creation may be partially replicated by the slot.

Aurora PostgreSQL 14.7.6, December 15, 2023

Critical stability enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2023-5870
  - CVE-2023-5869
  - CVE-2023-5868

High priority enhancements

- Improved the index scan query performance by skipping unnecessary B-tree page reads when a composite index is used with large data sets
- Fixed an issue with index scan queries that, in rare cases, could lead to database instance restarts

General stability enhancements

- Fixed an issue with logical replication actions being performed by someone other than the table owner

Aurora PostgreSQL 14.7.5, November 14, 2023

Critical stability enhancements

- Backported a fix for the following security issue:
  - CVE-2023-38545
- Fixed an issue related to `pg_cron` background worker processes

General enhancements

- Fixed an issue that could result in read replica lag due to stale metadata
- Fixed an issue related to buffer pin locking that in rare cases can result in a crash

Aurora PostgreSQL 14.7.4, October 5, 2023

Critical stability enhancements

- Backported a fix for the following PostgreSQL community security issue:
  - CVE-2023-39417
  - CVE-2023-2454

High priority enhancements

- Fixed an issue which can cause a database instance to restart while executing I/O intensive read workloads

- Fixed an issue which can cause vacuum operations to become blocked after the restart of an Aurora replica
- Fixed an issue that would cause high CPU usage and prevent new connections

General enhancements

- Introduced diagnostics for the transient metadata used for I/O

Aurora PostgreSQL 14.7.3, July 24, 2023

General enhancements

- Fixed an issue related to storage space reclamation following table drop or reindex or truncate operations.
- Fixed an issue with the calculation of the `AuroraReplicaLag` metric
- Fixed a bug which can cause unavailability during ZDP
- Fixed an issue that prevented reclaiming storage on transaction commits
- Fixed an issue preventing `pglogical` from logging conflicting rows during the apply phase
- Added Aurora Serverless v2 scaling enhancements
- Fixed an issue where, in rare cases, the `aws_s3` extension could fail to import from an Amazon S3 bucket with a name containing dots
- Provided options to configure the timeouts within the `aws_lambda` extension. By setting the following parameters (GUCs), customers will now be able to change the connect and request timeouts for AWS Lambda integration:
  - `aws_lambda.connect_timeout_ms`
  - `aws_lambda.request_timeout_ms`
- Fixed multiple issues which can cause Aurora replicas with the improved read availability feature to restart when reconnecting with the writer instance
- Fixed an issue preventing a survivable reader reconnect

Aurora PostgreSQL 14.7.2, May 10, 2023

General enhancements

- Fixed an error when loading the `test_decoding` plugin in `pg_create_logical_replication_slot`
- Fixed an issue that causes logical replication to fail when using write-through cache
- Updated the Oracle client used by the `oracle_fdw` extension to version 21.9.0.0.0

Aurora PostgreSQL 14.7.1, April 5, 2023

New features

- Introduced a new QPM plan hash calculation for multi-schema support. If users want to use QPM in multi-schema environments, they can set the `apg_plan_mgmt.plan_hash` version to 2 and call `apg_plan_mgmt.validate_plans`('`update_plan_hash`').
- Logical replication enhancements to improve memory and CPU usage during the processing of large transactions.
- The CloudWatch metric `ReplicationSlotDiskUsage` now tracks logical replication specific storage across Aurora storage and local storage.
- Starting with Aurora PostgreSQL versions 15.2 and 14.7, a user needs to be granted the `CONNECT` privilege on each database to connect even if the user is granted access to the `rds_superuser` role. Prior to Aurora PostgreSQL versions 15.2 and 14.7, a user was able to connect to any database and system table if the user was granted the `rds_superuser` role. Previous Aurora PostgreSQL versions are not impacted by this change, and users with access to the `rds_superuser` role do not require the `CONNECT` privilege to access databases in their Aurora PostgreSQL cluster.

High priority stability enhancements

- Fixed an issue where the commit latency metrics weren't updated

General enhancements

- Upgraded `PROJ` support to version 9.1.0
- Upgraded the `GDAL` library in `PostGIS` to version 3.5.3

- Fixed the upgrade paths from pg_hint_plan 1.3x to 1.4
- Added support for the TCN and SEG extensions
- Improved performance of deletes from b-tree and hash indexes on Aurora replicas
- Includes Aurora Serverless v2 scaling enhancements
- Fixed an issue in QPM that prevented the enforcement of approved plans when joining partitioned tables
- Fixed an issue that caused incorrect buffer hit counts in EXPLAIN
- Improved the engine startup time, particularly on large instances with many objects
- The Aurora function aurora_stat_logical_wal_cache() is now visible to all users
- Fixed an issue in QPM that could cause unavailability when enforcing plans from prepared statements

Additional improvements and enhancements

- Updated the following extensions:
  - hll to version 2.17
  - Oracle_fdw to version 2.5.0
  - orafce to version 4.0.0
  - pg_cron to version 1.4.2
  - pg_hint_plan to version 1.4.1
  - pg_logical to version 2.4.2
  - pg_trgm to version 1.4
  - pgrouting to version 3.4.1
  - plv8 to version 3.1.4
  - PostGIS to version 3.3.2
  - SEG to version 1.0
  - TCN to version 1.0
  - wal2json to version 2.5

For information about extensions and modules, see Extensions supported for Aurora PostgreSQL 14.

PostgreSQL 14.6

This release of Aurora PostgreSQL is compatible with PostgreSQL 14.6. For more information about the improvements in PostgreSQL 14.6, see PostgreSQL release 14.6.

Releases and patches

- Aurora PostgreSQL 14.6.16, August 07, 2026
- Aurora PostgreSQL 14.6.13, June 18, 2025
- Aurora PostgreSQL 14.6.12, April 29, 2025
- Aurora PostgreSQL 14.6.10, November 18, 2024
- Aurora PostgreSQL 14.6.9, August 7, 2024
- Aurora PostgreSQL 14.6.8, March 13, 2024
- Aurora PostgreSQL 14.6.7, December 15, 2023
- Aurora PostgreSQL 14.6.6, November 17, 2023
- Aurora PostgreSQL 14.6.5, October 04, 2023
- Aurora PostgreSQL 14.6.4, September 13, 2023
- Aurora PostgreSQL 14.6.2, March 3, 2023
- Aurora PostgreSQL 14.6.1, February 17, 2023
- Aurora PostgreSQL 14.6.0, January 20, 2023

Aurora PostgreSQL 14.6.16, August 07, 2026

Critical stability enhancements

- Fixed a bug in the aws_s3 extension which, in rare circumstances, can cause database unavailability.
- Fixed an issue in Babelfish where table-valued parameters would store only the last row N times, where N is the total number of rows provided.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2026-2003.
  - CVE-2026-2004.

- CVE-2026-2005.
- CVE-2026-2006.
- CVE-2026-2007.
- CVE-2026-3172.
- CVE-2026-6472.
- CVE-2026-6473.
- CVE-2026-6474.
- CVE-2026-6475.
- CVE-2026-6476.
- CVE-2026-6477.
- CVE-2026-6478.
- CVE-2026-6479.
- CVE-2026-6575.
- CVE-2026-6637.
- CVE-2026-6638.

Security enhancements

- Improved permission validation in the babelfish_set_role function when setting roles.

General enhancements

- Fixed an issue to reduce CPU overhead while establishing Encryption in Transit between the database engine and the storage layer.
- Fixed an issue where ALTER FUNCTION might fail with "routine name is not unique."

Aurora PostgreSQL 14.6.13, June 18, 2025

Critical stability enhancements

- Fixed an issue related to the interaction between Aurora Serverless scaling and the improved reader availability functionality that might result in longer recovery times and impact availability.

- Fixed an issue in the `rds_activity_stream` extension that could cause brief periods of unavailability during configuration reloads and when maximum connections are consumed.

General enhancements

- Added support for newly released AWS Regions in the aws_s3 extension.
- Fixed an issue where unexpected internal communication channel re-establishments might cause increased latency on data processing.

Aurora PostgreSQL 14.6.12, April 29, 2025

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-1094.

Aurora PostgreSQL 14.6.10, November 18, 2024

High priority enhancements

- Fixed an issue that would cause a longer restart time when `rds.enable_plan_management` is turned on, but apg_plan_mgmt extension is not installed.
- Fixed issues where the replication of vacuum operations might cause a restart when handling conflicts with user queries.
- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-7348.

Aurora PostgreSQL 14.6.9, August 7, 2024

Critical stability enhancements

- Fixed a pg_repack issue causing two vacuums to concurrently process the same table.

General enhancements

- Fixed issue where minor version upgrades with ZDP would fail resulting in longer upgrade times.

Aurora PostgreSQL 14.6.8, March 13, 2024

General enhancements

- Allow `rds_superuser` to terminate backends which are not explicitly associated with a role.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-0985.

Critical stability enhancements

- Fixed an issue related to `apg_plan_mgmt`.
- Fixed a deadlock issue in Aurora Storage which can result in writer failover.
- Fixed an issue where the slot might partially replicate active transactions during logical replication slot creation.

Aurora PostgreSQL 14.6.7, December 15, 2023

Critical stability enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2023-5870.
  - CVE-2023-5869.
  - CVE-2023-5868.

General stability enhancements

- Fixed an issue where someone other than the table owner performed logical replication actions.

Aurora PostgreSQL 14.6.6, November 17, 2023

Critical stability enhancements

- Backported a fix for the following security issue:

  - CVE-2023-38545.
- Fixed an issue related to `pg_cron` background worker processes.

Aurora PostgreSQL 14.6.5, October 04, 2023

Critical stability enhancements

- Backported a fix for the following PostgreSQL community security issue:
  - CVE-2023-2455.
  - CVE-2023-2454.

High priority stability enhancements

- Fixed an issue which blocked vacuum operations after the restart of an Aurora replica.
- Fixed an issue which can cause a database instance to restart while executing IO intensive read workloads.
- Fixed an issue that would cause high CPU usage and prevent new connections.

General enhancements

- Introduced diagnostics for the transient metadata used for I/O.

Aurora PostgreSQL 14.6.4, September 13, 2023

General enhancements

- Added Aurora Serverless v2 scaling enhancements.
- Fixed an issue in `pg_cron` which can prevent scaling in Aurora Serverless v2.
- Fixed an issue with the calculation of the `AuroraReplicaLag` metric.
- Fixed a bug which can cause unavailability during ZDP.
- Fixed an issue preventing `pglogical` from logging conflicting rows during the apply phase.
- Fixed an issue where, in rare cases, the `aws_s3` extension could fail to import from an Amazon S3 bucket with a name containing dots.

- Provided options to configure the timeouts within the `aws_lambda` extension. By setting the following parameters, you can now change the connect and request timeouts for AWS Lambda integration:
  - `aws_lambda.connect_timeout_ms`
  - `aws_lambda.request_timeout_ms`

Aurora PostgreSQL 14.6.2, March 3, 2023

Critical stability enhancements

- Backported a fix for the following PostgreSQL community security issue:
  - CVE-2022-41862.

General stability enhancements

- Fixed an issue where the approved plans for joins with partitioned tables weren't being enforced.
- Fixed an issue in `PostGIS` where the `GDAL` data wasn't loading.
- Fixed an issue that increased the amount of recovery work during startup if logical replication is enabled.
- Fixed an issue with the `aws_s3` extension where loading a large number of records can time out.
- Fixed an issue that causes logical replication to fail when using write-through cache.

Aurora PostgreSQL 14.6.1, February 17, 2023

Critical stability enhancements

- Fixed a critical stability issue.

Aurora PostgreSQL 14.6.0, January 20, 2023

High priority stability enhancements

- Fixed an issue where an upgrade fails because the oldest `MultiXactId` is updated incorrectly.
- Fixed an issue that could lead to a brief period of unavailability.

General stability enhancements

- Fixed an issue that caused DB instance migration failures.
- Fixed an issue where the DB fails to start because of an inconsistency in the metadata.
- Improved the error handling and diagnosability.
- Upgraded the `RDKit` extension to version 4.2.
- Upgraded the `GDAL` library to version 3.4.3.
- Fixed an issue where the cluster cache management process doesn't shutdown gracefully.
- Fixed an issue that can cause certain processes to linger in an inconsistent state during a clean shutdown.
- Fixed an issue with the `pg_repack` extension.
- Improved the collation library, `glibc`, handling with a new independent default collation library.

PostgreSQL 14.5 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 14.5. For more information about the improvements in PostgreSQL 14.5, see PostgreSQL release 14.5.

Releases and patches

- Aurora PostgreSQL 14.5.8, November 22, 2024
- Aurora PostgreSQL 14.5.7, August 7, 2024
- Aurora PostgreSQL 14.5.6, March 13, 2024
- Aurora PostgreSQL 14.5.5, December 18, 2023
- Aurora PostgreSQL 14.5.4, November 17, 2023
- Aurora PostgreSQL 14.5.3, October 17, 2023
- Aurora PostgreSQL 14.5.2, March 2, 2023
- Aurora PostgreSQL 14.5.1, December 13, 2022
- Aurora PostgreSQL 14.5.0, November 09, 2022

Aurora PostgreSQL 14.5.8, November 22, 2024

High priority enhancements

- Fixed an issue that would cause a longer restart time when `rds.enable_plan_management` is turned on, but apg_plan_mgmt extension is not installed.
- Fixed issues where the replication of vacuum operations may cause a restart when handling conflicts with user queries.

Aurora PostgreSQL 14.5.7, August 7, 2024

Critical stability enhancements

- Fixed a pg_repack issue causing two vacuums to concurrently process the same table.

General enhancements

- Fixed issue where minor version upgrades with ZDP would fail resulting in longer upgrade times.

Aurora PostgreSQL 14.5.6, March 13, 2024

General enhancements

- Allow `rds_superuser` to terminate backends which are not explicitly associated with a role.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-0985

Critical stability enhancements

- Fixed an issue related to `apg_plan_mgmt`.
- Fixed a deadlock issue in Aurora Storage which can result in writer failover.
- Fixed an issue where active transactions during logical replication slot creation may be partially replicated by the slot.

Aurora PostgreSQL 14.5.5, December 18, 2023

Critical stability enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2023-5870
  - CVE-2023-5869
  - CVE-2023-5868

General stability enhancements

- Fixed an issue with logical replication actions being performed by someone other than the table owner

Aurora PostgreSQL 14.5.4, November 17, 2023

Critical stability enhancements

- Backported a fix for the following security issue:
  - CVE-2023-38545
- Fixed an issue related to `pg_cron` background worker processes

Aurora PostgreSQL 14.5.3, October 17, 2023

High priority stability enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2023-39417
  - CVE-2023-2455
  - CVE-2023-2454
  - CVE-2022-41862

High priority enhancements

- Fixed an issue which blocked vacuum operations after the restart of an Aurora replica
- Fixed an issue that would cause high CPU usage and prevent new connections

General stability enhancements

- Fixed an issue which causes the stats collector process to repeatedly restart
- Improved the scale times for Aurora Serverless v2
- Fix a bug which can cause unavailability during ZDP
- Fixed an issue preventing `pglogical` from logging conflicting rows during the apply phase
- Fixed an issue where, in rare cases, the `aws_s3` extension could fail to import from an S3 bucket with a name containing dots
- Provided options to configure the timeouts within the `aws_lambda` extension. By setting the following parameters, customers will now be able to change the connect and request timeouts for AWS Lambda integration:
  - `aws_lambda.connect_timeout_ms`
  - `aws_lambda.request_timeout_ms`
- Fixed an issue which can cause a database instance to restart while executing I/O intensive read workloads
- Fixed an issue that causes logical replication to fail when using write-through cache

Aurora PostgreSQL 14.5.2, March 2, 2023

General stability enhancements

- Fixed an issue where the approved plans for joins with partitioned tables weren't being enforced
- Fixed an issue that could cause the unavailability of query plan management (QPM)
- Fixed an issue that increased the amount of recovery work during startup if logical replication is enabled
- Fixed an issue with the `aws_s3` extension where loading a large number of records can time out
- Fixed an issue with the `pg_cron` parallel running of tasks

Aurora PostgreSQL 14.5.1, December 13, 2022

General stability enhancements

- Fixed an issue that can cause increased network traffic when a writer instance transmits logs to a replica instance

- Fixed an issue where the engine experiences stability issues during database minor and patch release upgrades
- Fixed an issue that could cause unavailability during replication
- Fixed an issue that could cause data inconsistency during replication

Aurora PostgreSQL 14.5.0, November 09, 2022

High priority stability enhancements

- Fixed an Aurora Serverless v2 scaling issue
- Fixed an issue which caused Aurora Serverless v2 shrink failure

General stability enhancements

- Improved buffer cache scavenging when the buffer cache is in duress
- Fixed an issue in database activity streams that leads to high memory consumption
- Fixed an issue where DB instances could restart when applying changes from a logical replication subscription
- Fixed an issue that caused DB instance restarts
- Fixed an issue where a DB instance restarts recursively while generating monitoring metrics during a crash
- Fixed an issue where a DB instance restarted during performance metric collection
- Fixed an issue where an attempt to connect to the database would fail with `SSLV3_ALERT_CERTIFICATE_UNKNOWN`
- Improved the error reporting in case of an inconsistent `B-tree` index
- Improved the diagnostic logging around setting invalid hint bits
- Fixed an issue where autovacuum would incorrectly skip tables
- Improved the logical replication prefetching
- Fixed a durability issue in the `GIN` indexes
- Provided options to configure `MultiXact SLRU` cache. By setting the following parameters (GUCs), customers will now be able to change the `MultiXact SLRU` cache sizes:
  - `multixact_members_cache_size`
  - `multixact_offsets_cache_size`

- Fixed an issue to detect and cancel stuck major version upgrades
- Fixed an issue in hash join that could lead to increased memory consumption
- Improved the logical replication performance
- Fixed an issue that causes database activity stream inconsistency when the monitoring agent is unavailable
- Upgraded the GEOS version to 3.10.3
- Updated the PLV8 version to 3.0.0
- Updated the PostGIS extension to version 3.2.3
- Fixed an issue with `st_orientedenvelope` that caused it to loop with a 1-D input to return 0
- Fixed an issue where the connection to SQL Server using `tds_fdw` fails

PostgreSQL 14.4 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 14.4. For more information about the improvements in PostgreSQL 14.4, see PostgreSQL release 14.4.

Releases and patches

- Aurora PostgreSQL 14.4.11, November 20, 2024
- Aurora PostgreSQL 14.4.10, August 7, 2024
- Aurora PostgreSQL 14.4.9, March 13, 2024
- Aurora PostgreSQL 14.4.8, December 22, 2023
- Aurora PostgreSQL 14.4.7, November 17, 2023
- Aurora PostgreSQL 14.4.6, October 19, 2023
- Aurora PostgreSQL 14.4.5, December 14, 2022
- Aurora PostgreSQL 14.4.4, November 17, 2022
- Aurora PostgreSQL 14.4.0, October 13, 2022

Aurora PostgreSQL 14.4.11, November 20, 2024

High priority enhancements

- Fixed an issue that would cause a longer restart time when `rds.enable_plan_management` is turned on, but apg_plan_mgmt extension is not installed.

- Fixed issues where the replication of vacuum operations may cause a restart when handling conflicts with user queries.
- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-7348

Aurora PostgreSQL 14.4.10, August 7, 2024

Critical stability enhancements

- Fixed a pg_repack issue causing two vacuums to concurrently process the same table.

General enhancements

- Fixed issue where minor version upgrades with ZDP would fail resulting in longer upgrade times.

Aurora PostgreSQL 14.4.9, March 13, 2024

General enhancements

- Allow `rds_superuser` to terminate backends which are not explicitly associated with a role.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-0985

Critical stability enhancements

- Fixed an issue related to `apg_plan_mgmt`.
- Fixed a deadlock issue in Aurora Storage which can result in writer failover.
- Fixed an issue where active transactions during logical replication slot creation may be partially replicated by the slot.

Aurora PostgreSQL 14.4.8, December 22, 2023

Critical stability enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2023-5870
  - CVE-2023-5869
  - CVE-2023-5868

General stability enhancements

- Fixed an issue with logical replication actions being performed by someone other than the table owner

Aurora PostgreSQL 14.4.7, November 17, 2023

Critical stability enhancements

- Backported a fix for the following security issue:
  - CVE-2023-38545
- Fixed an issue related to `pg_cron` background worker processes

Aurora PostgreSQL 14.4.6, October 19, 2023

High priority stability enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2023-39417
  - CVE-2023-2455
  - CVE-2023-2454
  - CVE-2022-41862
  - CVE-2022-2625

High priority enhancements

- Fixed an issue which blocked vacuum operations after the restart of an Aurora replica

- Fixed an issue that would cause high CPU usage and prevent new connections

General stability enhancements

- Fixed an issue which causes the stats collector process to repeatedly restart
- Improved the scale times for Aurora Serverless v2
- Fix a bug which can cause unavailability during ZDP
- Fixed an issue preventing `pglogical` from logging conflicting rows during the apply phase
- Fixed an issue where, in rare cases, the `aws_s3` extension could fail to import from an S3 bucket with a name containing dots
- Provided options to configure the timeouts within the `aws_lambda` extension. By setting the following parameters, customers will now be able to change the connect and request timeouts for AWS Lambda integration:
  - `aws_lambda.connect_timeout_ms`
  - `aws_lambda.request_timeout_ms`

Aurora PostgreSQL 14.4.5, December 14, 2022

General stability enhancements

- Fixed an issue where the engine experiences stability issues during database minor and patch release upgrades
- Fixed an issue that could cause unavailability during replication
- Fixed an issue that causes database activity stream inconsistency when the monitoring agent is unavailable
- Fixed an issue that could cause data inconsistency during replication

Aurora PostgreSQL 14.4.4, November 17, 2022

High priority stability enhancements

- Fixed an issue that can cause increased network traffic when a writer instance transmits logs to a replica instance

Aurora PostgreSQL 14.4.0, October 13, 2022

High priority stability enhancements

- Fixed an issue where PLV8 crashed during a JavaScript error scenario
- Fixed an issue where PLV8 crashed when trying to acquire a semaphore to execute the next task
- Fixed an issue where scaling an Aurora Serverless v2 instance gets stuck if VACUUM is running

General stability enhancements

- Fixed a bug where Aurora PostgreSQL can't file the `relfilenode`
- Fixed a database restart issue when a plan gets invaliated but the engine still checks if it is valid
- Fixed a stuck scaling issue when the current scaling event times out
- Upgraded the `plv8` extension to version 3.0.0
- Upgraded the `PostGIS` extension to version 3.2.3
- Fixed an issue where extended query messages might be lost during zero-downtime patching (ZDP) causing the extended query to hang after the ZDP completion

PostgreSQL 14.3 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 14.3. For more information about the improvements in PostgreSQL 14.3, see PostgreSQL release 14.3.

Releases and patches

- Aurora PostgreSQL 14.3.11, November 20, 2024
- Aurora PostgreSQL 14.3.10, August 7, 2024
- Aurora PostgreSQL 14.3.9, March 13, 2024
- Aurora PostgreSQL 14.3.8, December 22, 2023
- Aurora PostgreSQL 14.3.7, November 17, 2023
- Aurora PostgreSQL 14.3.6, October 19, 2023
- Aurora PostgreSQL 14.3.5, December 14, 2022
- Aurora PostgreSQL 14.3.4, November 17, 2022
- Aurora PostgreSQL 14.3.3, October 13, 2022
- Aurora PostgreSQL 14.3.1, July 6, 2022

- Aurora PostgreSQL 14.3.0, June 21, 2022

Aurora PostgreSQL 14.3.11, November 20, 2024

High priority enhancements

- Fixed an issue that would cause a longer restart time when `rds.enable_plan_management` is turned on, but apg_plan_mgmt extension is not installed.
- Fixed issues where the replication of vacuum operations may cause a restart when handling conflicts with user queries.
- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-7348

Aurora PostgreSQL 14.3.10, August 7, 2024

Critical stability enhancements

- Fixed a pg_repack issue causing two vacuums to concurrently process the same table.
- Fixed a V8 Engine CVE-2018-6065 for PLV8 2.x.

General enhancements

- Fixed issue where minor version upgrades with ZDP would fail resulting in longer upgrade times.

Aurora PostgreSQL 14.3.9, March 13, 2024

General enhancements

- Allow `rds_superuser` to terminate backends which are not explicitly associated with a role.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-0985

Critical stability enhancements

- Fixed an issue related to `apg_plan_mgmt`.
- Fixed a deadlock issue in Aurora Storage which can result in writer failover.
- Fixed an issue where active transactions during logical replication slot creation may be partially replicated by the slot.

Aurora PostgreSQL 14.3.8, December 22, 2023

Critical stability enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2023-5870
  - CVE-2023-5869
  - CVE-2023-5868

General stability enhancements

- Fixed an issue with logical replication actions being performed by someone other than the table owner

Aurora PostgreSQL 14.3.7, November 17, 2023

Critical stability enhancements

- Backported a fix for the following security issue:
  - CVE-2023-38545
- Fixed an issue related to `pg_cron` background worker processes

Aurora PostgreSQL 14.3.6, October 19, 2023

High priority stability enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2023-39417
  - CVE-2023-2455

- CVE-2023-2454
- CVE-2022-41862
- CVE-2022-2625

High priority enhancements

- Fixed an issue which blocked vacuum operations after the restart of an Aurora replica
- Fixed an issue that would cause high CPU usage and prevent new connections

General stability enhancements

- Fixed an issue which causes the stats collector process to repeatedly restart
- Improved the scale times for Aurora Serverless v2
- Fix a bug which can cause unavailability during ZDP
- Fixed an issue preventing `pglogical` from logging conflicting rows during the apply phase
- Fixed an issue where, in rare cases, the `aws_s3` extension could fail to import from an S3 bucket with a name containing dots
- Provided options to configure the timeouts within the `aws_lambda` extension. By setting the following parameters, customers will now be able to change the connect and request timeouts for AWS Lambda integration:
  - `aws_lambda.connect_timeout_ms`
  - `aws_lambda.request_timeout_ms`

Aurora PostgreSQL 14.3.5, December 14, 2022

General stability enhancements

- Fixed an issue where the engine experiences stability issues during database minor and patch release upgrades
- Fixed an issue that could cause unavailability during replication
- Fixed an issue that causes database activity stream inconsistency when the monitoring agent is unavailable
- Fixed an issue that could cause data inconsistency during replication

Aurora PostgreSQL 14.3.4, November 17, 2022

High priority stability enhancements

- Fixed an issue that can cause increased network traffic when a writer instance transmits logs to a replica instance

Aurora PostgreSQL 14.3.3, October 13, 2022

High priority stability enhancements

- Fixed a `PLV8` issue where the base parameter doesn't get loaded properly into the memory
- Fixed an issue where scaling an Aurora Serverless v2 instance gets stuck if VACUUM is running

General stability enhancements

- Fixed a bug where Aurora PostgreSQL can't file the relfilenode
- Fixed a database restart issue when a plan gets invaliated but the engine still checks if it is valid
- Fixed a stuck scaling issue when the current scaling event times out
- Upgraded the `PostGIS` extension to version 3.1.7
- Fixed an issue where extended query messages might be lost during zero-downtime patching (ZDP) causing the extended query to hang after the ZDP completion

Aurora PostgreSQL 14.3.1, July 6, 2022

Critical stability enhancements

- Fixed an issue that could cause periods of unavailability during a storage node restart

High priority stability enhancements

- Fixed an error handling issue related to out-of-memory conditions which could result in brief periods of unavailability
- Fixed an issue when the connection to SQL Server fails using the `TDS_FDW` extension to query a foreign table
- Fixed an issue that caused connections using the provided root certificate to fail

- Improved the diagnostic and supportability information in case of inconsistent B-tree index entries

Aurora PostgreSQL 14.3.0, June 21, 2022

New features

- Supports SCRAM password encryption method. For more information, see Using SCRAM for PostgreSQL password encryption.
- Users with the `rds_superuser` role can now create roles for users.

Additional improvements and enhancements

- Contains all of the fixes, features, and improvements present in Aurora PostgreSQL 13.7.
- Backported the following bug fix from the PostgreSQL 14.4 release: Reverted changes to `CONCURRENTLY` that "sped up" Xmin advance to prevent Index Corruption with the `CREATE INDEX CONCURRENTLY` / `REINDEX CONCURRENTLY` commands.
- This release supports `lo` extension version 1.1.
- This release supports `old_snapshot` extension version 1.0.
- This release supports EBCDIC collations for the mainframe modernization efforts. For more information, see Aurora PostgreSQL collations for EBCDIC and other mainframe migrations in the *Amazon Aurora User Guide*.
- Updated the following extensions:
  - `amcheck` to version 1.3
  - `btree_gist` to version 1.6
  - `cube` to version 1.5
  - `hll` to version 2.16
  - `hstore` to version 1.8
  - `intarray` to version 1.5
  - `log_fdw` to version 1.3
  - `oracle_fdw` to version 2.4.0
  - `pg_hint_plan` to version 1.4
  - `pg_partman` to version 4.6.0

- pg_repack to version 1.4.7
- pg_stat_statements to version 1.9
- pg_trgm to version 1.6
- pgaudit to version 1.6.1
- pgrouting to version 3.2.0
- pgtap to version 1.2.0
- postgres_fdw to version 1.1

PostgreSQL 13 versions (includes some deprecated versions)

Version updates

- PostgreSQL 13.23
- PostgreSQL 13.22 (Deprecated)
- PostgreSQL 13.21 (Deprecated)
- PostgreSQL 13.20 (Deprecated)
- PostgreSQL 13.18 (Deprecated)
- PostgreSQL 13.16 (Deprecated)
- PostgreSQL 13.15 (Deprecated)
- PostgreSQL 13.14 (Deprecated)
- PostgreSQL 13.13 (Deprecated)
- PostgreSQL 13.12 (Deprecated)
- PostgreSQL 13.11 (Deprecated)
- PostgreSQL 13.10 (Deprecated)
- PostgreSQL 13.9
- PostgreSQL 13.8 (Deprecated)
- PostgreSQL 13.7 (Deprecated)
- PostgreSQL 13.6 (Deprecated)
- PostgreSQL 13.5 (Deprecated)
- PostgreSQL 13.4 (Deprecated)

- PostgreSQL 13.3 (Deprecated)

PostgreSQL 13.23

This release of Aurora PostgreSQL is compatible with PostgreSQL 13.23. For more information about the improvements in PostgreSQL 13.23, see PostgreSQL release 13.23.

Releases and patches

- Aurora PostgreSQL 13.23.5, July 20, 2026
- Aurora PostgreSQL 13.23.4, June 9, 2026
- Aurora PostgreSQL 13.23.3, May 29, 2026
- Aurora PostgreSQL 13.23.2, March 20, 2026
- Aurora PostgreSQL 13.23.1, January 16, 2026
- Aurora PostgreSQL 13.23, December, 18, 2025

Aurora PostgreSQL 13.23.5, July 20, 2026

Critical stability enhancements

- Fixed an issue that in rare cases could prevent failovers from completing to the intended failover target.
- Fixed an issue that in rare cases could lead to database unavailability for read node clusters after a restart.
- Fixed an issue in Babelfish where table-valued parameters would store only the last row N times, where N is the total number of rows provided.
- Fixed an issue that improves B-tree prefetch performance when index scans were not properly utilizing prefetch buffers.

General enhancements

- Fixed an issue where GRANT SET ON PARAMETER incorrectly allowed permissions to be granted for non-existent extension parameters.
- Fixed an issue where an internal timeout during Zero-Downtime Patching could exceed its intended duration, causing unnecessary fallback to a standard restart with increased downtime.

Aurora PostgreSQL 13.23.4, June 9, 2026

High priority enhancements

- Fixed an issue with suboptimal B-tree prefetch causing increased I/O wait times.
- Back-ported fixes for the following PostgreSQL community security issues:
  - CVE-2026-6472
  - CVE-2026-6473
  - CVE-2026-6474
  - CVE-2026-6475
  - CVE-2026-6476
  - CVE-2026-6477
  - CVE-2026-6478
  - CVE-2026-6479
  - CVE-2026-6575
  - CVE-2026-6637
  - CVE-2026-6638

Aurora PostgreSQL 13.23.3, May 29, 2026

Critical stability enhancements

- Fixed an issue where ALTER FUNCTION could fail with "routine name is not unique".

Aurora PostgreSQL 13.23.2, March 20, 2026

Critical stability enhancements

- Fixed a bug in the aws_s3 extension which, in rare circumstances, can cause database unavailability.
- Fixed an issue where read nodes may restart when attempting to connect to the new write node following a failover.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2026-2003.
  - CVE-2026-2004.
  - CVE-2026-2005.
  - CVE-2026-2006.
  - CVE-2026-2007.
  - CVE-2026-3172.
- Fixed a bug in Query Plan Management that prevented plan capture.
- Fixed a bug in the Aurora Storage Daemon that could cause database unavailability in rare cases when enhanced logical replication is enabled.
- Fixed an issue where file handlers could remain improperly allocated after a major version upgrade.
- Fixed an issue where databases could run out of memory due to excessive storage metadata in rare circumstances.
- Fixed a bug in the logging utility that could cause database unavailability due to buffer overflow in rare circumstances.
- Fixed an issue in cache initialization that could cause database unavailability during startup.
- Fixed an issue where global databases planned switchover operations could become unresponsive while waiting for storage volume growth to complete.

General enhancements

- Fixed an issue where ANALYZE operations did not work correctly on tables containing large LOB data
- Fixed an issue where correlated any transform could return an error message 'failed to build any 3-way joins' during transformation.
- Fixed an issue where optimization was not triggered due to incorrect tracking of transaction metadata.

Aurora PostgreSQL 13.23.1, January 16, 2026

Critical stability enhancements

- Fixed a timing condition in the aws_s3 extension which, in rare cases, can cause database unavailability

Aurora PostgreSQL 13.23, December, 18, 2025

New features

- Introduced a change which improves static availability of Aurora PostgreSQL writers when, in rare conditions, write operations to storage are delayed due to undergoing storage node maintenance.
- Improvements to minimize switchover downtime during Blue/Green switchover operations, by temporarily blocking transaction commit operations on the Blue environment prior to switchover, reducing drift between the Blue and Green clusters.
- Improved recovery time by optimizing commit log (clog) loading during database cold starts and unplanned restarts, with significant benefits for smaller instances with limited CPU cores.

Critical stability enhancements

- Improved cold start performance through faster cache initialization.
- Reduced memory footprint for idle connections in Serverless v2 instances.

High priority enhancements

- Back-ported fixes for the following PostgreSQL community security issues:
  - CVE-2025-12818
  - CVE-2025-12817
- Fixed a database shutdown issue that could cause major version upgrades to fail.
- Fixed a rare major version upgrade failure with large memory allocations.
- Fixed an issue preventing rds_superuser from managing prepared transactions owned by other users.

General enhancements

- Updated the following extensions:
  - h3_pg to version 4.2.3.

- Fixed a race condition in Postgres lock release with optimized read enabled.
- Improved PgAudit memory usage during parameter-heavy operations.
- Fixed database initialization failure when max_connections is set to low values.
- Improved Serverless v2 scaling performance under high CPU load.
- Improved Serverless v2 write performance.
- Fixed delays in Serverless v2 scale-down operations.
- Fixed multiple low-risk memory leaks.
- Improved database shutdown during maintenance to enhance availability.
- Improved database startup performance through optimized storage initialization.
- Fixed storage metadata initialization issue that could delay engine startup.
- Fixed region determination failures in aws_s3, aws_ml, and aws_lambda extensions.
- Fixed crash scenario when using pg_buffercache extension during Serverless v2 scaling.

PostgreSQL 13.22 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 13.22. For more information about the improvements in PostgreSQL 13.22, see PostgreSQL release 13.22.

Releases and patches

- Aurora PostgreSQL 13.22.1, November 25, 2025
- Aurora PostgreSQL 13.22, November 25, 2025

Aurora PostgreSQL 13.22.1, November 25, 2025

Critical stability enhancements

- Fixed a database shutdown issue which could cause major version upgrade to fail.
- Fixed an Issue that could cause readers to restart or readers cannot perform read operations due to missing storage segments

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-12817

  - CVE-2025-12818
- Fixed an issue with the cleanup of files created by NOTIFY channels, which could lead to high local storage usage.

General enhancements

- Fixed an issue that could cause delays in scaling down for Serverless V2 instances.
- Fixed IMDS throttling issues by reducing IMDS requests for region related information.

Aurora PostgreSQL 13.22, November 25, 2025

New features

- Introduced a new feature to significantly reduce database downtime during restarts by initializing Aurora storage metadata in parallel and reducing contention during initialization.

Critical stability enhancements

- Fixed an issue related to Optimized Reads-enabled tiered cache functionality that might result in longer recovery times after a failover to Aurora replica instances.

High priority enhancements

- Back-ported fixes for the following PostgreSQL community security issues:
  - CVE-2025-8713
  - CVE-2025-8714
  - CVE-2025-8715
- Fixed an issue in logical replication where subscriber databases could skip replicating transactions after recovering from a crash.
- Fixed an issue which can cause vacuum operations to become blocked after the restart of an Aurora replica in a Global Database.
- Fixed a security issue when altering routine ownership.

General enhancements

- Updated the following extensions:
  - oracle_fdw to version to 2.8.0
  - pg_repack extension to version 1.5.2
  - aws_lamba extension to version 2.0
- Improved file metadata initialization times.
- Fixed an issue that caused reader instance to restart when attempting to create PostgreSQL SLRU files.
- Fixed an issue which caused prolonged Serverless v2 scaling time.
- Fixed an issue that could cause database restart during Serverless v2 scaling.
- Fixed a timing issue in replication diagnostics that could prevent accurate reporting of Aurora replica recovery status when state transitions occur in rapid succession.
- Updated the aws_lambda extension to version 2.0, which resolves a performance issue that was present in version 1.0.
- Added support to include Geodetic TIFF grid files for PROJ.
- Fixed an issue that could cause database restart during aws_s3 export.
- Addressed an issue with logging when replication slots are invalidated.
- Fixed CVE-2023-3079 for V8 Engine in the PLV8 extension.
- Fixed an issue with parallel heap scans that could lead to index inconsistency on tables larger than 16TiB when synchronize_seqscans is enabled.
- Fixed an issue where read queries may time out on Aurora replica nodes during the replay of lazy truncation triggered by vacuum on the writer node.
- Fixed a crash that occurred when using ST_AsGeoJSON after upgrading to a release containing PostGIS 3.5.1 without running postgis_extensions_upgrade.
- Fixed an issue which prevented online recovery of an Aurora Replica forcing offline recovery.

PostgreSQL 13.21 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 13.21. For more information about the improvements in PostgreSQL 13.21, see PostgreSQL release 13.21.

Releases and patches

- Aurora PostgreSQL 13.21.4, January 15, 2026
- Aurora PostgreSQL 13.21.3, September 16, 2025

- Aurora PostgreSQL 13.21.2, August 8, 2025
- Aurora PostgreSQL 13.21.1, June 30, 2025
- Aurora PostgreSQL 13.21, June 30, 2025

Aurora PostgreSQL 13.21.4, January 15, 2026

Critical stability enhancements

- Fix an issue which could trigger a race in change data capture (CDC) volume expansion.
- Process cleanup improvements during zero downtime patching to ensure that all database processes are properly terminated, preventing shutdown stalls and improving zero downtime patching success.
- Fixed a database shutdown issue which could cause major version upgrade to fail.
- Fixed an Issue that could cause readers to restart or readers cannot perform read operations due to missing storage segments.

High priority enhancements

- Fixed an issue which could cause a restart during the start of logical replication data synchronization.
- Fixed an issue with the cleanup of files created by NOTIFY channels, which could lead to high local storage usage.
- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-12817.

    CVE-2025-12818.

General enhancements

- Fixed an issue that could cause delays in scaling down for Serverless V2 instances.
- Fixed IMDS throttling issues by reducing IMDS requests for region related information.

Aurora PostgreSQL 13.21.3, September 16, 2025

Critical stability enhancements

- Fixed an issue in engine minor and patch upgrades where in rare cases a backend can incorrectly process an interrupt early.
- Fixed an issue where minor version upgrades and patch upgrades might take a few seconds longer because the runtime process wasn't exiting gracefully.
- Fixed an issue related to Optimized Reads-enabled tiered cache functionality that might result in longer recovery times after a failover to Aurora replica instances.
- Fixed a security issue when altering routine ownership.
- Fixed an issue with Serverless v2 scaling that may cause unavailability when fetching pages from storage.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-8713.
  - CVE-2025-8714.
  - CVE-2025-8715.
- Backported fixes for the following PLv8 extension's V8 Engine security vulnerabilities.
  - CVE-2022-1364.
  - CVE-2023-3079.
- Fixed a race where old writer may not step down after a new writer is promoted and continues to write.

General enhancements

- Fixed an issue that could in certain cases prevent online recovery of an Aurora Replica from completing.
- Fixed an issue that could cause unavailability when `apg_plan_mgmt` is enabled.
- Fixed an issue with parallel heap scans that could lead to index inconsistency on tables larger than 16TiB when synchronize_seqscans is enabled.
- Fixed an issue in Query Plan Management with running a utility statement immediately after installing the extension or resetting shared memory.
- Fixed an issue with Babelfish ZDP that could lead to instance reboot after minor version ugprade in some cases.

- Fixed an issue in enforcing, validating and evolving the `plans` extension in Query Plan Management.
- Fixed an issue during numeric calculations involving aggregate functions with all-column selections.
- Fixed an issue with prolonged Serverless v2 scaling time.
- Fixed a crash that occurred when using ST_AsGeoJSON after upgrading to a release containing The `PostGIS` extension 3.5.1 without running postgis_extensions_upgrade.
- Fixed an issue causing a replica restart during the replica join case.
- Fixed an issue which can cause vacuum operations to become blocked after the restart of an Aurora replica in a Global Database.
- Fixed and issue where storage client may crash during instance restart.

Aurora PostgreSQL 13.21.2, August 8, 2025

Critical stability enhancements

- Fixed an issue which could prevent logical replication from resuming after upgrade.
- Fixed an issue with Serverless v2 scaling that may cause unavailability when performing reads from Aurora Storage.

Aurora PostgreSQL 13.21.1, June 30, 2025

High priority enhancements

- Fixed a performance issue affecting instance restart operations.

Aurora PostgreSQL 13.21, June 30, 2025

New features

- Improved Serverless v2 scaling for storage bound workloads.
- Improved Serverless v2 scaling through optimized management of memory maps.

Critical stability enhancements

- Fixed an issue where Serverless instances would fail to perform Zero Downtime Patching after automatic resume.
- Added library dependency verification during minor and patch upgrades to ensure storage metadata recovery is safe before proceeding.

High priority enhancements

- Fixed an issue in the rds_activity_stream extension that could cause brief periods of unavailability during configuration reloads.
- Fixed an issue where server will fail to start if a previous startup was prematurely terminated.

General enhancements

- Updated the following extensions:
  - apg_plan_mgmt to 2.9.
  - The `pgaudit` extension to 1.5.3.
  - The `rdkit` extension to 4.6.1 (2024_09_6).
  - The `pg_repack` extension to 1.5.1.
  - The `pglogical` extension to 2.4.5.
- Improvements to make Serverless v2 scaling more efficient on reader nodes.
- Fixed an issue that prevents Zero Downtime Patching from completing successfully on Serverless v2 auto-pause enabled instances.
- Fixed an issue in pgdam that causes the engine (with pgdam enabled) to crash when hitting maximum connections.
- Fixed an issue in the `pg_bigm` extension that can cause unavailability when the extension interacts with the GIN index.
- In Blue/Green deployments, creating or modifying temporary objects is no longer classified as restricted DDL.
- Added function aurora_stat_resource_usage() to report current CPU usage, allocated and used memory for all the backends.
- Fixed an issue which prevented Zero Downtime Patching when cache recovery is disabled.
- Fixed a synchronization issue where Zero Downtime Patching could fail due to premature engine ready state reporting.

- Fixed an issue in checkpoint replication to have storage metadata position be consistent in reader.
- Fixed an issue which causes RO node to restart while its reconnecting to RW node.
- Fixed an issue where RO client process can be stuck in LWLock:BufferIO wait event after being disconnected from the writer.
- Fixed an issue where RO node could crash when frequently falling behind RW node.
- Fixed an issue in the aws_s3 extension that could cause an import operation to restart and reinsert previously inserted rows.

PostgreSQL 13.20 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 13.20. For more information about the improvements in PostgreSQL 13.20, see PostgreSQL release 13.20.

Releases and patches

- Aurora PostgreSQL 13.20.5, February 03, 2026
- Aurora PostgreSQL 13.20.4, October 9, 2025
- Aurora PostgreSQL 13.20.3, June 03, 2025
- Aurora PostgreSQL 13.20.2, May 01, 2025
- Aurora PostgreSQL 13.20, April 07, 2025

Aurora PostgreSQL 13.20.5, February 03, 2026

Critical stability enhancements

- Fixed an issue that could cause garbage collection to get blocked on a change data capture (CDC) volume.
- Fix an issue which could trigger a race in change data capture (CDC) volume expansion.
- Process cleanup improvements during zero downtime patching to ensure that all database processes are properly terminated, preventing shutdown stalls and improving zero downtime patching success.
- Fixed a database shutdown issue which could cause major version upgrade to fail.
- Fixed an Issue that could cause readers to restart or readers cannot perform read operations due to missing storage segments.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-12817.
  - CVE-2025-12818.
- Fixed an issue which could cause a restart during the start of logical replication data synchronization.
- Fixed an issue where premature status updates during zero downtime patching could cause unnecessary failures by ensuring proper synchronization with server startup.
- Fixed an issue with the cleanup of files created by NOTIFY channels, which could lead to high local storage usage.

General enhancements

- Fixed IMDS throttling issues by reducing IMDS requests for region related information.

Aurora PostgreSQL 13.20.4, October 9, 2025

Critical stability enhancements

- Fixed an issue in engine minor and patch upgrades where in rare cases a backend can incorrectly process an interrupt early.
- Fixed an issue where minor version upgrades and patch upgrades might take a few seconds longer because the runtime process wasn't exiting gracefully.
- Fixed an issue related to Optimized Reads-enabled tiered cache functionality that might result in longer recovery times after a failover to Aurora replica instances.
- Fixed a security issue when altering routine ownership.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-8713.
  - CVE-2025-8714.
  - CVE-2025-8715.
- Backported fixes for the following PLv8 extension's V8 Engine security vulnerabilities:

- CVE-2022-1364.
- CVE-2023-3079.
- Fixed a race condition where old writer instance may not step down after a new writer instance is promoted and continues to write.

General enhancements

- Fixed an issue that could prevent online recovery of an Aurora Replica from completing.
- Fixed an issue that could cause unavailability when `apg_plan_mgmt` is enabled.
- Fixed an issue with parallel heap scans that could lead to index inconsistency on tables larger than 16TiB when synchronize_seqscans is enabled.
- Fixed an issue in Query Plan Management with running a utility statement immediately after installing the extension or resetting shared memory.
- Fixed an issue in enforcing, validating and evolving the `plans` extension in Query Plan Management.
- Fixed an issue during numeric calculations involving aggregate functions with all-column selections.
- Fixed an issue that could cause prolonged Serverless v2 scaling time.
- Fixed a crash that occurred when using ST_AsGeoJSON after upgrading to a release containing The `PostGIS` extension 3.5.1 without running postgis_extensions_upgrade.
- Fixed an issue causing a replica restart during the replica join case.
- Fixed an issue which can cause vacuum operations to become blocked after the restart of an Aurora replica in a Global Database.
- Fixed an issue causing query execution failure for execution the `plans` extension using the “bitmap heap scan” access method.
- Fixed an issue impacting query execution performance for execution the `plans` extension using the “bitmap heap scan” access method.
- Fixed and issue where storage client may crash during instance restart.

Aurora PostgreSQL 13.20.3, June 03, 2025

Critical stability enhancements

- Fixed an issue which can cause the database to become unresponsive when performing actions with Aurora Storage.
- Fixed an issue related to the interaction between Aurora Serverless scaling and the improved reader availability functionality that might result in longer recover times and impact availability.
- Fixed an issue in the `rds_activity_stream` extension that could cause brief periods of unavailability during configuration reloads and when maximum connections are consumed.
- Fixed an issue in handling parameter lists from previous versions of Query Plan Management.

General enhancements

- Fixed an issue in handling of asynchronous I/O cancellation that could cause processes to become stuck indefinitely.
- Fixed an issue where unexpected internal communication channel re-establishments may cause increased latency on data processing.
- Added support of newly released Regions for the aws_s3 extension.
- Fixed an issue that can cause process stuck indefinitely at LWLock:BufferIO wait event.
- Fixed an issue that can cause RO instance crash under heavy workload.
- Fixed an issue that causes minor version upgrades to fail with sleep/wake feature.

Aurora PostgreSQL 13.20.2, May 01, 2025

Critical priority enhancements

- Fixed an issue which can cause the database to become unresponsive when performing actions with Aurora storage.

Aurora PostgreSQL 13.20, April 07, 2025

High priority enhancements

- Fixed an issue where Aurora in-Region failovers would result in failures in database startup.
- Fixed a security issue in the `rds_activity_stream` extension.
- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-1094.

General enhancements

- Aurora storage metadata now initializes more quickly during unplanned failovers and server restarts, reducing overall downtime. Larger instances benefit the most by leveraging higher parallelism.
- Improved performance of file metadata operations.
- Made improvements to database downtime during a `planned` extension switchover for Global Databases.
- In Blue/Green deployments, creating or modifying temporary objects is no longer classified as restricted DDL.
  - Creating temporary objects with syntax such as CREATE TEMPORARY TABLE x AS SELECT * FROM isn't supported.
  - Creating indexes on temporary tables isn't supported.
- The Blue/Green deployment switchover won’t be blocked by the `REFRESH MATERIALIZED VIEW` statement.
- Improved allocation of Write-Ahead Log (WAL) stream numbers, resulting in increased throughput for write-heavy workloads on the new Graviton 4 high-end instances.
- Fixed an issue where reader upgrade was taking longer than expected.
- Updated the following extensions:
  - Update the `pgvector` extension to 0.8.0.
  - Update the `pg_cron` extension to v1.6.5.
  - Update the `tds_fdw` extension to 2.0.4.
  - Update the `postgis` extension to 3.5.1.
  - Update the `pg_partman` extension to v5.2.4.
  - Update the `orafce` extension to 4.14.0.
  - Update the `rds_tools` extension to 1.9.
  - Update the `rdkit` extension to Release_2024_09_3.

PostgreSQL 13.18 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 13.18. For more information about the improvements in PostgreSQL 13.18, see PostgreSQL release 13.18.

Releases and patches

- Aurora PostgreSQL 13.18.7, January 28, 2026
- Aurora PostgreSQL 13.18.6, November 13, 2025
- Aurora PostgreSQL 13.18.5, June 24, 2025
- Aurora PostgreSQL 13.18.4, March 24, 2025
- Aurora PostgreSQL 13.18.3, February 13, 2025
- Aurora PostgreSQL 13.18.2, January 20, 2025
- Aurora PostgreSQL 13.18.1, December 27, 2024
- Aurora PostgreSQL 13.18, December 27, 2024

Aurora PostgreSQL 13.18.7, January 28, 2026

Critical stability enhancements

- Fixed an issue that could cause garbage collection to get blocked on a change data capture (CDC) volume.
- Fix an issue which could trigger a race in change data capture (CDC) volume expansion.
- Process cleanup improvements during zero downtime patching to ensure that all database processes are properly terminated, preventing shutdown stalls and improving zero downtime patching success.
- Fixed an Issue that could cause readers to restart or readers cannot perform read operations due to missing storage segments.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-12817.
  - CVE-2025-12818.
- Fixed an issue where premature status updates during zero downtime patching could cause unnecessary failures by ensuring proper synchronization with server startup.

General enhancements

- Fixed IMDS throttling issues by reducing IMDS requests for region related information.

Aurora PostgreSQL 13.18.6, November 13, 2025

Critical stability enhancements

- Fixed an issue in engine minor and patch upgrades where in rare cases a backend can incorrectly process an interrupt early.
- Fixed an issue where minor version upgrades and patch upgrades might take a few seconds longer because the runtime process was not exiting gracefully.
- Fixed an issue related to Optimized Reads-enabled tiered cache functionality that might result in longer recovery times after a failover to Aurora replica instances.
- Fixed a security issue when altering routine ownership.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-8713.
  - CVE-2025-8714.
  - CVE-2025-8715.
- Backported fixes for the following PLv8 extension's V8 Engine security vulnerabilities:
  - CVE-2022-1364.
  - CVE-2023-3079.
- Fixed a race condition where old writer instance may not step down after a new writer instance is promoted and continues to write.

General enhancements

- Fixed an issue that could prevent online recovery of an Aurora Replica from completing.
- Fixed an issue that could cause unavailability when apg_plan_mgmt is enabled.
- Fixed an issue with parallel heap scans that could lead to index inconsistency on tables larger than 16TiB when synchronize_seqscans is enabled.
- Fixed an issue in Query Plan Management with running a utility statement immediately after installing the extension or resetting shared memory.
- Fixed an issue in enforcing, validating and evolving plans in Query Plan Management.
- Fixed an issue that could cause prolonged Serverless v2 scaling time.

- Fixed a crash that occurred when using ST_AsGeoJSON after upgrading to a release containing PostGIS 3.5.1 without running postgis_extensions_upgrade.
- Fixed an issue causing a replica restart during the replica join case.
- Fixed an issue which can cause vacuum operations to become blocked after the restart of an Aurora replica in a Global Database.
- Fixed an issue causing query execution failure for execution plans using the "bitmap heap scan" access method.
- Fixed an issue impacting query execution performance for execution plans using the "bitmap heap scan" access method.

Aurora PostgreSQL 13.18.5, June 24, 2025

Critical stability enhancements

- Fixed an issue related to the interaction between Aurora Serverless scaling and the improved reader availability functionality that might result in longer recover times and impact availability.
- Fixed an issue in the rds_activity_stream extension that could cause brief periods of unavailability during configuration reloads and when maximum connections are consumed.

General enhancements.

- Fixed an issue in handling of asynchronous I/O cancellation that could cause processes to become stuck indefinitely.
- Fixed an issue that causes minor version upgrades to fail with sleep/wake feature.
- Fixed an issue that can cause process stuck indefinitely at LWLock:BufferIO wait event.
- Added support of newly released Regions for the aws_s3 extension.
- Fixed an issue where unexpected internal communication channel re-establishments may cause increased latency on data processing.

Aurora PostgreSQL 13.18.4, March 24, 2025

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-1094.

General enhancements

- Fixed an issue on the replica where a network interruption may not correctly re-establish connection with the writer.

Aurora PostgreSQL 13.18.3, February 13, 2025

High priority enhancements

- Fixed CVE-2020-6418 for V8 Engine in the PLV8 extension.

Aurora PostgreSQL 13.18.2, January 20, 2025

Critical Priority enhancements

- Fixed a security issue in the `rds_activity_stream` extension.

High priority enhancements

- Fixed an issue in Global DB switchover and failover that could result in customers needing to rebuild their mirror clusters.
- Fixed an issue where transactional commands may terminate the connection in some cases.

General enhancements

- Fixed an ownership issue where the `postgis_raster` extension could not be updated correctly from a previous the PostGIS extension v2 installation.

Aurora PostgreSQL 13.18.1, December 27, 2024

Critical Priority enhancements

- Fixed an issue where the server was restarting when the connections were reset by the peer.

Aurora PostgreSQL 13.18, December 27, 2024

New features for 13.18

- Optimized the minor version and patch upgrade process to reduce downtime for read replicas.

Critical stability enhancements for 13.18

- Fixed an issue that in rare cases can cause CPU usage spike.

High priority enhancements for 13.18

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2024-10979
  - CVE-2024-10978
  - CVE-2024-10977
  - CVE-2024-10976

General enhancements for 13.18

- Made multiple improvements to Aurora in-Region failover which reduces database downtime further by improving storage metadata and faster buffer cache initialization.
- Made multiple improvements to upgrades with Zero-Downtime Patching (ZDP) which reduces connection restore time and enhances ZDP resilience from failures.
- Fixed an issue where the server_id value wasn't updated after an Amazon RDS Blue/Green Deployment switchover.
- Fixed an issue that could cause database restart during hash index extension.
- Fixed an issue that would cause migration from RDS PostgreSQL to fail in the presence of nested tablespaces.
- Fixed an issue that would cause excessive engine startup times in the presence of a large number of logical replication files.
- Fixed an issue that could cause a database restart when calling functions from `aws_s3`, `aws_lambda`, and `aws_ml` extensions in the same database session as `aws_s3.table_import_from_s3()`. This fix may decrease the per-call performance of functions from the `aws_s3`, `aws_lambda`, and `aws_ml` extensions.

- Fixed an issue that could cause database restart during serverless scaling.
- Fixed an issue that prevented updating the pgTAP extension to version 1.3.0 or later.
- Fixed an issue in the PostGIS extension, which in rare cases, could cause a DB instance restart.
- Fixed an issue in the pg_repack extension that compromises the integrity of invalid indexes.

Additional improvements and enhancements for 13.18

- Updated the following extensions:
  - pg_cron extension to v1.6.4.
  - PostGIS extension to version 3.4.3.
  - PROJ library extension to version 9.5.0.
  - GEOS library extension to verison 3.13.0.
  - orafce extension to 4.12.0.
  - pgvector extension to 0.7.4.
  - RDKit extension to 2024_03_6 release (4.6).
  - pg_hint_plan extension to version 1.3.10.

PostgreSQL 13.16 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 13.16. For more information about the improvements in PostgreSQL 13.16, see PostgreSQL release 13.16.

Releases and patches

- Aurora PostgreSQL 13.16.7, February 13, 2026
- Aurora PostgreSQL 13.16.6, November 21, 2025
- Aurora PostgreSQL 13.16.5, July 11, 2025
- Aurora PostgreSQL 13.16.4, April 17, 2025
- Aurora PostgreSQL 13.16.2, January 29, 2025
- Aurora PostgreSQL 13.16.1, January 02, 2025
- Aurora PostgreSQL 13.16, September 30, 2024

Aurora PostgreSQL 13.16.7, February 13, 2026

Critical stability enhancements

- Fixed an issue that could cause garbage collection to get blocked on a change data capture (CDC) volume.
- Fix an issue which could trigger a race in change data capture (CDC) volume expansion.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-12817.
  - CVE-2025-12818.

Aurora PostgreSQL 13.16.6, November 21, 2025

Critical stability enhancements

- Fixed an issue where minor version upgrades and patch upgrades might take a few seconds longer because the runtime process was not exiting gracefully.
- Fixed an issue related to Optimized Reads-enabled tiered cache functionality that might result in longer recovery times after a failover to Aurora replica instances.
- Fixed a security issue when altering routine ownership.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-8713.
  - CVE-2025-8714.
  - CVE-2025-8715.
- Backported fixes for the following PLv8 extension's V8 Engine security vulnerabilities:
  - CVE-2022-1364.
  - CVE-2023-3079.
- Fixed a race condition where old writer instance may not step down after a new writer instance is promoted and continues to write.

General enhancements

- Fixed an issue that could prevent online recovery of an Aurora Replica from completing.
- Fixed an issue that could cause unavailability when apg_plan_mgmt is enabled.
- Fixed an issue with parallel heap scans that could lead to index inconsistency on tables larger than 16TiB when synchronize_seqscans is enabled.
- Fixed an issue in Query Plan Management with running a utility statement immediately after installing the extension or resetting shared memory.
- Fixed an issue in enforcing, validating and evolving plans in Query Plan Management.
- Fixed an issue that could cause prolonged Serverless v2 scaling time.
- Fixed a crash that occurred when using ST_AsGeoJSON after upgrading to a release containing PostGIS 3.5.1 without running postgis_extensions_upgrade.
- Fixed an issue causing a replica restart during the replica join case.
- Fixed an issue causing query execution failure for execution plans using the "bitmap heap scan" access method.
- Fixed an issue impacting query execution performance for execution plans using the "bitmap heap scan" access method.

Aurora PostgreSQL 13.16.5, July 11, 2025

Critical stability enhancements

- Fixed an issue related to the interaction between Aurora Serverless scaling and the improved reader availability functionality that might result in longer recover times and impact availability.
- Fixed an issue in the rds_activity_stream extension that could cause brief periods of unavailability during configuration reloads and when maximum connections are consumed.

General enhancements

- Fixed an issue in handling of asynchronous I/O cancellation that could cause processes to become stuck indefinitely.
- Fixed an issue that causes minor version upgrades to fail with sleep/wake feature.
- Fixed an issue that can cause process stuck indefinitely at LWLock:BufferIO wait event.
- Added support of newly released Regions for the aws_s3 extension.

- Fixed an issue where unexpected internal communication channel re-establishments may cause increased latency on data processing.

Aurora PostgreSQL 13.16.4, April 17, 2025

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues.
  - CVE-2025-1094.

Aurora PostgreSQL 13.16.2, January 29, 2025

Critical stability enhancements.

- Fixed a security issue in the `rds_activity_stream` extension.

High priority enhancements.

- Fixed an issue in Global DB switchover and failover that could result in customers needing to rebuild their mirror clusters.
- Fixed an issue where transactional commands may terminate the connection in some cases.

General enhancements.

- Fixed an ownership issue where the postgis_raster extension could not be updated correctly from a previous the `PostGIS` extension v2 installation.

Aurora PostgreSQL 13.16.1, January 02, 2025

Critical stability enhancements

- Fixed an issue related to Query Plan Management background worker.
- Fixed a security issue in the `rds_activity_stream` extension.

High priority enhancements

- Fixed issue where Aurora in-Region failovers would result in failures in database startup.

- Fixed an issue for date functions to allow them to take into account the local/session timezone setting.
- Fixed an issue in Global DB switchover and failover that could result in customers needing to rebuild their mirror clusters.
- Fixed an issue where transactional commands may terminate the connection in some cases.
- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2024-10979.
  - CVE-2024-10978.
  - CVE-2024-10976.
  - CVE-2024-10977.

General enhancements

- Fixed an issue where minor version upgrades with ZDP would fail resulting in longer upgrade times.
- Made improvements to Aurora in-Region failover which reduces database downtime further with faster buffer cache initialization.
- Fixed an issue where reserved keyword “PRIMARY” caused syntax errors when used as a column name or alias in DML and DDL statements.
- Fixed an issue that could cause an error in the wal sender process when resuming logical replication.

Aurora PostgreSQL 13.16, September 30, 2024

New features

- Introduced a new fast failover feature to reduce database downtime during the `planned` extension failover events with fast storage metadata initialization and fast buffer cache recovery.
- Introduced an optimization to reduce Zero Downtime Patching (ZDP) quiet point duration to 1 second.

High priority enhancements

- Fixed issues where the replication of vacuum operations may cause a restart when handling conflicts with user queries.

- Fixed an issue where deleting a large range of keys from a BTree index could cause concurrent scans to crash.

General enhancements

- Enabled support for FIPS-validated cryptography, a fully owned AWS implementation. For more information, see AWS-LC is now FIPS 140-3 certified on AWS Security Blog.
- Improvements to database startup time during initialization and engine upgrades.
- Fixed an issue that prevented the inclusion of the `pg_bigm` extension in shared_preload_libraries.
- Fixed an issue during Zero Downtime Patching which causes some connections to be terminated due to long transferring time. A new ZDP metric in postgresql.log called `ZD_SOCKET_TRANSFER_CONN_DROPPED` represents these dropped connections.
- Improved reader availability for Aurora Replicas when using system administration functions.
- Fixed an in-memory two-phase commit (2PC) metadata caching issue that caused out-of-memory error on Aurora read replicas replicating from RDS PostgreSQL source instances.
- Fixed an issue in storage metadata initialization that can cause prolonged database startup time.
- Fixed an issue that will prevent reclaiming Aurora storage space during major version upgrade.

Additional improvements and enhancements

- Updated the following extensions:
  - `pgvector` extension to version 0.7.3.
  - `mysql_fdw` extension to version REL-2_9_2.
  - `orafce` extension to version 4.10.3.
  - pgTAP extension to version 1.3.3.
  - `pg_cron` extension to version 1.6.3.
  - `RDKit` extension to version 4.5 (Release 2024_03_5).
  - `wal2json` extension to version 2.6.
  - HypoPG extension to version 1.4.1.

PostgreSQL 13.15 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 13.15. For more information about the improvements in PostgreSQL 13.15, see PostgreSQL release 13.15.

Releases and patches

- Aurora PostgreSQL 13.15.5, July 17, 2025
- Aurora PostgreSQL 13.15.4, March 25, 2025
- Aurora PostgreSQL 13.15.3, January 29, 2025
- Aurora PostgreSQL 13.15.2, January 23, 2025
- Aurora PostgreSQL 13.15.1, September 27, 2024
- Aurora PostgreSQL 13.15, August 8, 2024

Aurora PostgreSQL 13.15.5, July 17, 2025

Critical stability enhancements

- Fixed an issue related to the interaction between Aurora Serverless scaling and the improved reader availability functionality that might result in longer recover times and impact availability.
- Fixed an issue in the rds_activity_stream extension that could cause brief periods of unavailability during configuration reloads and when maximum connections are consumed.

General enhancements

- Fixed an issue in handling of asynchronous I/O cancellation that could cause processes to become stuck indefinitely.
- Fixed an issue that causes minor version upgrades to fail with sleep/wake feature.
- Fixed an issue that can cause process stuck indefinitely at LWLock:BufferIO wait event.
- Added support of newly released Regions for the aws_s3 extension.
- Fixed an issue where unexpected internal communication channel re-establishments may cause increased latency on data processing.

Aurora PostgreSQL 13.15.4, March 25, 2025

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-1094.

Aurora PostgreSQL 13.15.3, January 29, 2025

High priority enhancements

- Fixed CVE-2020-6418 for V8 Engine in the PLV8 extension.

Aurora PostgreSQL 13.15.2, January 23, 2025

Critical stability enhancements

- Fixed an issue related to Query Plan Management background worker.

High priority enhancements

- Fixed an issue for date functions to allow them to take into account the local/session timezone setting.
- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2024-10979.
  - CVE-2024-10978.
  - CVE-2024-10976.
  - CVE-2024-10977.

General enhancements

- Fixed an issue where minor version upgrades with ZDP would fail resulting in longer upgrade times.
- Made improvements to Aurora in-Region failover which reduces database downtime further with faster buffer cache initialization.
- Fixed an issue that could cause an error in the wal sender process when resuming logical replication.

Aurora PostgreSQL 13.15.1, September 27, 2024

High priority enhancements

- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-7348

General enhancements

- Fixed an issue that would cause ZDP to fail on Aurora Optimized Reads Cache instances while upgrading into this version.

Aurora PostgreSQL 13.15, August 8, 2024

New features

- Aurora Serverless v2 now applies pending database parameter `max_connections` changes during upgrades. The Serverless V2 capacity changes result in pending `max_connections` changes. As many ZDP supported connections as allowed by `max_connections` will be preserved during upgrades.
- Introduced a feature to improve database start up time through faster buffer cache initialization during restarts and database upgrades.
- Minor version and patch upgrades may now complete faster in some cases.
- Reduced Aurora Serverless v2 scale up and scale down time in the presence of data intensive workloads or long running queries and busy or unrespoive connections.

Critical stability enhancements

- Fixed a pg_repack issue that would incorrectly allow two vacuum processes to operate concurrently on the same table.

High priority enhancements

- Fixed an issue which leads to cancellation of long-running queries on Global Database replica instances.

General enhancements

- Improved Aurora PostgreSQL performance for generative AI workloads using `pgvector`.
- Fixed issue where minor version upgrades with ZDP would fail in some cases resulting in longer upgrade times.
- Improved replay performance of vacuum operations on Aurora Replica instances.
- Fixed a bug where JDBC connections may not be preserved during ZDP enabled upgrades.
- Improvement to reduce postgres private memory fragmentation.
- Fixed an issue that caused two-phase commit files to remain, preventing proper cleanup.
- Improved memory handling while processing two phase commit files.
- Fixed an issue resulting in degraded performance during query planning on Aurora replicas.
- Improved availability of Aurora read replicas.

Additional improvements and enhancements

- Updated the following extensions:
  - `orafce` extension to version 4.9.4.
  - `pg_cron` extension to version 1.6.2.
  - `pg_partman` extension to version 5.1.0.
  - `pg_repack` extension to version 1.5.0.
  - `pg_tle` to version 1.4.0.
  - `pg_vector` extension to version 0.7.0.
  - `pgrouting` extension to version 3.6.2.
  - `pgTap` extension to version 1.3.2.
  - `PostGIS` extension to version 3.4.2.
  - `RDKit` extension to version 2024_03_1.

PostgreSQL 13.14 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 13.14. For more information about the improvements in PostgreSQL 13.14, see PostgreSQL release 13.14.

Releases and patches

- Aurora PostgreSQL 13.14.6, July 28, 2025
- Aurora PostgreSQL 13.14.5, April 16, 2025
- Aurora PostgreSQL 13.14.4, February 02, 2025
- Aurora PostgreSQL 13.14.3, October 7, 2024
- Aurora PostgreSQL 13.14.2, June 20, 2024
- Aurora PostgreSQL 13.14.1, April 29, 2024

Aurora PostgreSQL 13.14.6, July 28, 2025

Critical stability enhancements.

- Fixed an issue related to the interaction between Aurora Serverless scaling and the improved reader availability functionality that might result in longer recover times and impact availability.
- Fixed an issue in the `rds_activity_stream` extension that could cause brief periods of unavailability during configuration reloads and when maximum connections are consumed.

General enhancements.

- Fixed an issue in handling of asynchronous I/O cancellation that could cause processes to become stuck indefinitely.
- Fixed an issue in the read replica deletion which could result in a vacuum being held back and causing eventual unavailability of database.
- Fixed an issue that can cause process stuck indefinitely at LWLock:BufferIO wait event.
- Added support of newly released Regions for the `aws_s3` extension.
- Fixed an issue where unexpected internal communication channel re-establishments may cause increased latency on data processing.

Aurora PostgreSQL 13.14.5, April 16, 2025

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-1094.

Aurora PostgreSQL 13.14.4, February 02, 2025

Critical stability enhancements

- Fixed a security issue in the `rds_activity_stream` extension.

High priority enhancements

- Fixed an issue for date functions to allow them to take into account the local/session timezone setting.
- Fixed an issue in Global DB switchover and failover that can result in customers needing to rebuild their mirror clusters.
- Fixed an issue where transactional commands may terminate the connection in some cases.
- Fixed CVE-2020-6418 for V8 Engine in the PLV8 extension.
- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2024-10979.
  - CVE-2024-10978.
  - CVE-2024-10976.
  - CVE-2024-10977.
- **General enhancements**

  Fixed an ownership issue where the postgis_raster extension could not be updated correctly from a previous the `PostGIS` extension v2 installation.

Aurora PostgreSQL 13.14.3, October 7, 2024

General enhancements

- Fixed an issue that would cause ZDP to fail on Aurora Optimized Reads Cache instances while upgrading into this version.

High priority enhancements

- Fixed issues where the replication of vacuum operations may cause a restart when handling conflicts with user queries.
- Backported fixes for the following PostgreSQL community security issue:

- CVE-2024-7348

Aurora PostgreSQL 13.14.2, June 20, 2024

General enhancements

- Fixed multiple issues where minor version upgrades with ZDP would fail resulting in longer upgrade times.

High priority enhancements

- Fixed a crash with execution of pltsql user defined functions.
- Fixed an issue which led to cancellation of long-running queries on Global Database replica instances.

Critical stability enhancements

- Fixed an issue where a change in memory requirements during a minor version upgrade can cause zero-downtime patching and engine startup to fail.
- Fixed an issue with background worker where it may crash when executed in parallel worker context.
- Fixed a pg_repack issue causing two vacuums to concurrently process the same table.
- Fixed issues in how two-phase commit files are handled.

Aurora PostgreSQL 13.14.1, April 29, 2024

New features

- Added resource usage summary to pg_dump.

General enhancements

- Fixed multiple minor version upgrade issues to improve connection preservation with zero-downtime patching.
- Reduced database boot time due to improved initialization time for large volumes.

- Introduced faster COPY operations by reducing contention on the relation extension lock and proactively extending relations.
- Improvements to reduce replication lag by intelligently skipping the replay of certain log records, thereby reducing the replay load.
- Fixed an issue during recovery conflict on a read node which, in rare cases, could cause brief unavailability.
- Fixed an issue where a database would fail to startup during a major version upgrade patch, in rare scenarios.
- Improved availability of read replicas by allowing recovery from replication errors in more situations.
- Fixed an issue that would cause zero-downtime patching to timeout.
- Fixed a logical replication decoding issue that fails to process catalog modifying changes after spilling to storage if there was a concurrent aborted sub-transaction.
- Improved log record validation before it is written to storage.
- Fixed an issue that would result in sessions incorrectly reporting ClientRead wait events after a zero-downtime patching event.
- Fixed an ambiguous function definition of aws_s3.query_export_to_s3 when upgrading the aws_s3 extension from version 1.1 to 1.2.

High priority enhancements

- Fixed an issue related to resuming a logical replication slot where, in rare cases, it could cause the slot to become stuck.
- Fixed an issue that would result in a restart when creating a database in a tablespace.
- Fixed an issue related to incorrect logical replication error handling to improve DB stability.

Critical stability enhancements

- Fixed an issue related to replication origins that in rare cases might result in longer recovery time and impact availability.
- Fixed an issue that in rare cases may cause transactions to be partially replicated by newly created logical replication slots. For more information, see Potential data loss due to race condition during logical replication slot creation.

- Fixed an issue where a change in memory requirements during a minor version upgrade can cause zero-downtime patching and engine startup to fail.

Additional improvements and enhancements

- Updated the following extensions:
  - pg_tle extension to version 1.3.4.
  - PLV8 extension to version 3.1.10.
  - RDKit Cartridge to version Release_2023_09_4.
- New GUC Parameters has been added
  - pgtle.clientauth_databases_to_skip
  - pgtle.clientauth_db_name
  - pgtle.clientauth_num_parallel_workers
  - pgtle.clientauth_users_to_skip
  - pgtle.enable_clientauth
  - pgtle.passcheck_db_name

PostgreSQL 13.13 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 13.13. For more information about the improvements in PostgreSQL 13.13, see PostgreSQL release 13.13.

Releases and patches

- Aurora PostgreSQL 13.13.8, July 30, 2025
- Aurora PostgreSQL 13.13.7 April 22, 2025
- Aurora PostgreSQL 13.13.6, February 5, 2025
- Aurora PostgreSQL 13.13.5, September 17, 2024
- Aurora PostgreSQL 13.13.4, June 24, 2024
- Aurora PostgreSQL 13.13.3, March 13, 2024
- Aurora PostgreSQL 13.13.2, February 22, 2024
- Aurora PostgreSQL 13.13.0, December 21, 2023

Aurora PostgreSQL 13.13.8, July 30, 2025

Critical stability enhancements

- Fixed an issue related to the interaction between Aurora Serverless scaling and the improved reader availability functionality that might result in longer recover times and impact availability.
- Fixed an issue in the rds_activity_stream extension that could cause brief periods of unavailability during configuration reloads and when maximum connections are consumed.

General enhancements

- Fixed an issue in handling of asynchronous I/O cancellation that could cause processes to become stuck indefinitely.
- Fixed an issue in the read replica deletion which could result in a vaccum being held back and causing eventual unavailability of database.
- Fixed an issue that can cause process stuck indefinitely at LWLock:BufferIO wait event.
- Added support of newly released Regions for the aws_s3 extension.
- Fixed an issue where unexpected internal communication channel re-establishments may cause increased latency on data processing.

Aurora PostgreSQL 13.13.7 April 22, 2025

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-1094.

General enhancements

- Fixed an issue on the replica where a network interruption may not correctly re-establish connection with the writer.

Aurora PostgreSQL 13.13.6, February 5, 2025

Critical Priority enhancements

- Fixed a security issue in the `rds_activity_stream` extension.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2024-10979.
  - CVE-2024-10978.
  - CVE-2024-10977.
  - CVE-2024-10976.
- Fixed an issue for date functions to allow them to take into account the local/session timezone setting.
- Fixed an issue in Global DB switchover and failover that can result in customers needing to rebuild their mirror clusters.
- Fixed CVE-2020-6418 for V8 Engine in the PLV8 extension.

General enhancements

- Fixed an ownership issue where the postgis_raster extension could not be updated correctly from a previous the PostGIS extension v2 installation.

Aurora PostgreSQL 13.13.5, September 17, 2024

High priority enhancements

- Fixed an issue that would cause a longer restart time when `rds.enable_plan_management` is turned on, but apg_plan_mgmt extension is not installed.
- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-7348

Aurora PostgreSQL 13.13.4, June 24, 2024

General enhancements

- Fixed multiple issues where minor version upgrades with ZDP would fail resulting in longer upgrade times.

High priority enhancements

- Fixed an issue with Parallel query execution in which a backend may get into indefinite hang in certain cases.
- Fixed a crash with execution of pltsql user defined functions.
- Fixed an issue which led to cancellation of long-running queries on Global Database replica instances.

Critical stability enhancements

- Fixed an issue where a change in memory requirements during a minor version upgrade can cause zero-downtime patching and engine startup to fail.
- Fixed a pg_repack issue causing two vacuums to concurrently process the same table.

Aurora PostgreSQL 13.13.3, March 13, 2024

General enhancements

- Fixed a performance degradation issue in PLV8 extension.

Aurora PostgreSQL 13.13.2, February 22, 2024

General enhancements

- Allow `rds_superuser` to terminate backends which are not explicitly associated with a role.

High priority enhancements

- Fixed an issue where `pg_stat_statements` can block minor version upgrade during ZDP.
- Fixed an issue where a logical replication slot would no longer emit changes due to an overly strict data consistency check.
- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-0985

Critical stability enhancements

- Fixed an issue related to `apg_plan_mgmt`.
- Fixed a deadlock issue in Aurora Storage which can result in writer failover.
- Fixed an issue where active transactions during logical replication slot creation may be partially replicated by the slot.

Aurora PostgreSQL 13.13.0, December 21, 2023

Following the announcement of updates to the PostgreSQL database by the open source community, we have updated Amazon Aurora PostgreSQL-Compatible Edition to support PostgreSQL versions 15.5, 14.10, 13.13, and 12.17. These releases contain product improvements and bug fixes made by the PostgreSQL community, along with Aurora-specific improvements. New features and improvements for Babelfish for Aurora PostgreSQL version 3.4 are also included.

Refer to the Aurora version policy to help you to decide how often to upgrade and how to plan your upgrade process. As a reminder, if you are running any version of Amazon Aurora PostgreSQL version 11, you must upgrade to a newer major version by February 29, 2024.

New features

- Amazon Bedrock integration – By using the Amazon Aurora machine learning extension with your Aurora PostgreSQLDB cluster, you can now use Amazon Bedrock foundational AI models.
- Delegated Extension Support – This feature allows delegating extension management to lower privileged user with the new rds_extension role.
- Query Plan Management (QPM) enhancements:
  - Plan outlines will be updated to the latest format version as part of the `update_plan_hash` action for `apg_plan_mgmt.validate_plans()`.
  - Support was added for parallel append enforcement as a part of parallel query enforcement.
- Added support for the `HypoPG` extension at version 1.4.0.
- Added support for the `h3-pg` extension and the `h3-postgis` extension at version 4.1.3.

High priority enhancements

- Fixed an issue which may cause an Aurora replica to reboot when reading a page which was modified during `WAL` replay

- Fixed an issue where if a specific volume metadata is invalid on a source cluster, it will remain invalid on a cloned cluster. Since the clone cluster uses a new volume, the metadata will now be recreated.
- Fixed an issue which could, in rare cases, lead to an engine unavailable condition following a minor or patch version upgrade
- Fixed a bug that may cause an engine crash during zero-downtime patching (ZDP)
- Introduced a new parameter, `rds.enable_memory_management`, which is used to enable and disable the improved memory management feature.
- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2023-5870
  - CVE-2023-5869
  - CVE-2023-5868

General enhancements

- Fixed an issue which may cause an Aurora replica to reboot while reconnecting with the writer DB instance.
- Added support for the `rdkit.morgan_fp_size` parameter
- `rds-superuser` can now run the `pg_stat_reset_slru` function
- Fixed an issue where MultiXact SLRU accesses were not credited to the correct `pg_stat_slru` category.
- Fixed an issue which may cause unused `WAL` segements to not be properly removed
- Fixed an issue where `pglogical` does not correctly pass-through replication origin data when using the binary output format
- `rds_superuser` can now execute `ALTER COLLATION` to refresh the collation version of a locale in the catalog.
- Fixed a crash in `dblink` and `postgres_fdw` extensions due to invalid connections
- Fixed an issue where the `aws_s3` extension can import `HTTP` error responses into the table
- Record the version of the AWS independent default collation library version in pg_collation catalog.

Additional improvements and enhancements

- Updated the following extensions:
  - `mysql_fdw` to version 2.9.1
  - `Oracle_fdw` to version 2.6.0
  - `Orafce` to version 4.6.0
  - `pg_cron` to version 1.6.0
  - `pg_hint_plan` to version 1.3.9
  - `pg_proctab` to version 0.0.10
  - `plv8` to version 3.1.8
  - `PostGIS` to version 3.4.0
  - `prefix` to version 1.2.10
  - `RDKit` to version 4.4.0 (Release_2023_09_1)

For information about extensions and modules, see Extensions supported for Aurora PostgreSQL 13.

PostgreSQL 13.12 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 13.12. For more information about the improvements in PostgreSQL 13.12, see PostgreSQL release 13.12.

Releases and patches

- Aurora PostgreSQL 13.12.11, August 5, 2025
- Aurora PostgreSQL 13.12.10, May 7, 2025
- Aurora PostgreSQL 13.12.9, February 27 2025
- Aurora PostgreSQL 13.12.8, November 14, 2024
- Aurora PostgreSQL 13.12.7, June 25, 2024
- Aurora PostgreSQL 13.12.6, March 13, 2024
- Aurora PostgreSQL 13.12.5, February 22, 2024
- Aurora PostgreSQL 13.12.2, December 13, 2023
- Aurora PostgreSQL 13.12.1, November 09, 2023
- Aurora PostgreSQL 13.12.0, October 24, 2023

Aurora PostgreSQL 13.12.11, August 5, 2025

Critical stability enhancements

- Fixed an issue related to the interaction between Aurora Serverless scaling and the improved reader availability functionality that might result in longer recover times and impact availability.
- Fixed an issue in the rds_activity_stream extension that could cause brief periods of unavailability during configuration reloads and when maximum connections are consumed.

General enhancements

- Fixed an issue in the read replica deletion which could result in a vacuum being held back and causing eventual unavailability of database.
- Added support of newly released Regions for the aws_s3 extension.
- Fixed an issue where unexpected internal communication channel re-establishments may cause increased latency on data processing.

Aurora PostgreSQL 13.12.10, May 7, 2025

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-1094.

General enhancements

- Fixed an issue on the replica where a network interruption may not correctly re-establish connection with the writer.

Aurora PostgreSQL 13.12.9, February 27 2025

Critical Priority enhancements

- Fixed a security issue in the `rds_activity_stream` extension.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2024-10979.
  - CVE-2024-10978.
  - CVE-2024-10977.
  - CVE-2024-10976.
- Fixed an issue in Global DB switchover and failover that can result in customers needing to rebuild their mirror clusters.
- Fixed CVE-2020-6418 for V8 Engine in the PLV8 extension.

General enhancements

- Fixed an ownership issue where the postgis_raster extension could not be updated correctly from a previous the PostGIS extension v2 installation.

Aurora PostgreSQL 13.12.8, November 14, 2024

High priority enhancements

- Fixed an issue that would cause a longer restart time when `rds.enable_plan_management` is turned on, but apg_plan_mgmt extension is not installed.
- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-7348

Aurora PostgreSQL 13.12.7, June 25, 2024

General enhancements

- Fixed multiple issues where minor version upgrades with ZDP would fail resulting in longer upgrade times.

High priority enhancements

- Fixed an issue which led to cancellation of long-running queries on Global Database replica instances.

Critical stability enhancements

- Fixed an issue where a change in memory requirements during a minor version upgrade can cause zero-downtime patching and engine startup to fail.
- Fixed a pg_repack issue causing two vacuums to concurrently process the same table.

Aurora PostgreSQL 13.12.6, March 13, 2024

General enhancements

- Fixed a performance degradation issue in PLV8 extension.

Aurora PostgreSQL 13.12.5, February 22, 2024

General enhancements

- Allow `rds_superuser` to terminate backends which are not explicitly associated with a role.

High priority enhancements

- Fixed an issue where `pg_stat_statements` can block minor version upgrade during ZDP.
- Fixed an issue where a logical replication slot would no longer emit changes due to an overly strict data consistency check.
- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-0985

Critical stability enhancements

- Fixed an issue related to `apg_plan_mgmt`.
- Fixed a deadlock issue in Aurora Storage which can result in writer failover.
- Fixed an issue where active transactions during logical replication slot creation may be partially replicated by the slot.

Aurora PostgreSQL 13.12.2, December 13, 2023

Critical stability enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2023-5870
  - CVE-2023-5869
  - CVE-2023-5868

General stability enhancements

- Fixed an issue with logical replication actions being performed by someone other than the table owner

Aurora PostgreSQL 13.12.1, November 09, 2023

Critical stability enhancements

- Backported a fix for the following security issue:
  - CVE-2023-38545
- Fixed an issue related to `pg_cron` background worker processes

General enhancements

- Fixed an issue related to buffer pin locking that in rare cases can result in a crash

Aurora PostgreSQL 13.12.0, October 24, 2023

New features

- Added support for `mysql_fdw` version 2.9.0
- Added support in the `aws_s3` extension for exporting to an S3 bucket encrypted with a customer managed KMS key
- Improved the availability of Aurora replicas in the global DB secondary clusters
- Added support for query plan capture on Aurora replicas
- Added support for query plan enforcement with parallel query operators

- Allowed query plans under a given cost threshold to not be captured

High priority enhancements

- Included optimizations to improve the time to scale up in Aurora Serverless instances

General enhancements

- Fixed an issue in the `aws_s3` extension where the number of rows exported is incorrectly reported when the total number exceeds 2 billion
- Provided options to configure timeouts in the `aws_s3` extension. By setting the following parameters (GUCs), customers will now be able to change the timeout thresholds for imports from S3:
  - `aws_s3.curlopt_low_speed_limit`
  - `aws_s3.curlopt_low_speed_time`
- Prevented instance creation failure in some edge cases
- Improved the performance of replay of commit transaction operations on Aurora replicas
- Fixed an issue where, in rare cases, an import from the `aws_s3` extension fails to complete
- Updated the GEOS library for PostGIS to version 3.12.0
- Improved Aurora Serverless v2 database memory scaling which reduces the overall database instance scale time
- Added the `WAIT_EVENT_Aurora_CLUSTER_CACHE_MANAGER_SENDER` wait event to denote wait times in the cluster cache manager sender
- Added the `WAIT_EVENT_Aurora_SERVERLESS_MONITORING_MAIN` wait event to denote wait times in Aurora Serverless resource monitoring
- Fixed an issue where the database may crash during the start of a logical replication slot
- Increased the limit for `pg_cron` `cron.max_running_jobs` parameter from 100 to 1000
- Fixed a bug in `CREATE TABLE` command to handle table name starting with '#' correctly.

Additional improvements and enhancements

- Updated the following extensions:
  - `orafce` to version 4.3.0

- `pg_logical` to version 2.4.3
- `pgvector` to version 0.5.0
- `PostGIS` to version 3.3.3
- `RDKit` to version 4.3

For information about extensions and modules, see Extensions supported for Aurora PostgreSQL 13.

PostgreSQL 13.11 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 13.11. For more information about the improvements in PostgreSQL 13.11, see PostgreSQL release 13.11.

Releases and patches

- Aurora PostgreSQL 13.11.10, August 5, 2025
- Aurora PostgreSQL 13.11.9 April 30, 2025
- Aurora PostgreSQL 13.11.8, February 24 2025
- Aurora PostgreSQL 13.11.7, November 12, 2024
- Aurora PostgreSQL 13.11.6, August 7, 2024
- Aurora PostgreSQL 13.11.5, March 13, 2024
- Aurora PostgreSQL 13.11.4, December 14, 2023
- Aurora PostgreSQL 13.11.3, November 14, 2023
- Aurora PostgreSQL 13.11.2, October 4, 2023
- Aurora PostgreSQL 13.11.0, July 13, 2023

Aurora PostgreSQL 13.11.10, August 5, 2025

Critical stability enhancements

- Fixed an issue related to the interaction between Aurora Serverless scaling and the improved reader availability functionality that might result in longer recover times and impact availability.
- Fixed an issue in the rds_activity_stream extension that could cause brief periods of unavailability during configuration reloads and when maximum connections are consumed.

General enhancements

- Added support of newly released Regions for the aws_s3 extension.
- Fixed an issue where unexpected internal communication channel re-establishments may cause increased latency on data processing.

Aurora PostgreSQL 13.11.9 April 30, 2025

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-1094.

General enhancements

- Fixed an issue on the replica where a network interruption may not correctly re-establish connection with the writer.

Aurora PostgreSQL 13.11.8, February 24 2025

Critical Priority enhancements

- Fixed a security issue in the `rds_activity_stream` extension.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2024-10979.
  - CVE-2024-10978.
  - CVE-2024-10977.
  - CVE-2024-10976.
- Fixed an issue for date functions to allow them to take into account the local/session timezone setting.
- Fixed an issue in Global DB switchover and failover that can result in customers needing to rebuild their mirror clusters.
- Fixed CVE-2020-6418 for V8 Engine in the PLV8 extension.

General enhancements

- Fixed an ownership issue where the postgis_raster extension could not be updated correctly from a previous the PostGIS extension v2 installation.

Aurora PostgreSQL 13.11.7, November 12, 2024

High priority enhancements

- Fixed an issue that would cause a longer restart time when `rds.enable_plan_management` is turned on, but apg_plan_mgmt extension is not installed.
- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-7348

Aurora PostgreSQL 13.11.6, August 7, 2024

Critical stability enhancements

- Fixed a pg_repack issue causing two vacuums to concurrently process the same table.

General enhancements

- Fixed issue where minor version upgrades with ZDP would fail resulting in longer upgrade times.

Aurora PostgreSQL 13.11.5, March 13, 2024

General enhancements

- Allow `rds_superuser` to terminate backends which are not explicitly associated with a role.

High priority enhancements

- Fixed an issue that would cause a logical replication slot to transiently error out in the presence of aborted subtransactions and DDL.
- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-0985

Critical stability enhancements

- Fixed an issue related to `apg_plan_mgmt`.
- Fixed a deadlock issue in Aurora Storage which can result in writer failover.
- Fixed an issue where active transactions during logical replication slot creation may be partially replicated by the slot.

Aurora PostgreSQL 13.11.4, December 14, 2023

Critical stability enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2023-5870
  - CVE-2023-5869
  - CVE-2023-5868

General stability enhancements

- Fixed an issue with logical replication actions being performed by someone other than the table owner

Aurora PostgreSQL 13.11.3, November 14, 2023

Critical stability enhancements

- Backported a fix for the following security issue:
  - CVE-2023-38545
- Fixed an issue related to `pg_cron` background worker processes

General enhancements

- Fixed an issue that could result in read replica lag due to stale metadata
- Fixed an issue related to buffer pin locking that in rare cases can result in a crash

Aurora PostgreSQL 13.11.2, October 4, 2023

High priority stability enhancements

- Backported a fix for the following PostgreSQL community security issue:
  - CVE-2023-39417

High priority enhancements

- Fixed an issue which can cause a database instance to restart while executing I/O intensive read workloads.
- Fixed an issue which can cause vacuum operations to become blocked after the restart of an Aurora replica.
- Fixed an issue that would cause a crash when executing the `COPY FROM` command.
- Fixed an issue that would cause high CPU usage and prevent new connections.
- Fixed an issue where `UPDATE` and `DELETE` from a table with foreign key could fail unexpectedly with "ERROR: 40001: could not serialize access due to concurrent update when using Serializable snapshot".

General enhancements

- Introduced diagnostics for the transient metadata used for I/O.
- Fixed an issue that prevented the enablement of improved memory management in certain scenarios in Aurora PostgreSQL 15.3.

Aurora PostgreSQL 13.11.0, July 13, 2023

Following the announcement of updates to the PostgreSQL database by the open source community, we have updated Amazon Aurora PostgreSQL-Compatible Edition to support PostgreSQL versions 15.3, 14.8, 13.11, 12.15, and 11.20. These releases contains product improvements and bug fixes made by the PostgreSQL community, along with Aurora-specific improvements. The releases also contain new features and improvements for Babelfish for Aurora PostgreSQL version 3.2, and improved support for AWS Database Migration Service. Refer to the Amazon Aurora versions to help you to decide how often to upgrade and how to plan your upgrade process. As a reminder, if you are running any version of Amazon Aurora PostgreSQL 11, you must upgrade to a newer major version by February 29, 2024.

New features

- This release contains memory management improvements which increase database stability and availability by proactively preventing issues caused by insufficient memory. For more information, see Improved memory management in Aurora PostgreSQL.
- Added support for the `pgvector` extension version 0.4.1.

High priority enhancements

- Fixed an issue with the subtransaction metadata handling when performing a survivable reader reconnect.
- Fixed an issue during ZDP which is related to the extension environment variables.
- Addressed a transient error during logical replication that caused a process to incorrectly calculate that it had encountered an unexpected page.
- Fixed an issue which causes a period of unavailability due to a partially created replication origin state file.

General enhancements

- Added a new function, `aurora_stat_memctx_usage()`, to show backend memory use breakdown at a Postgres memory context level.
- Provided options to configure the timeouts within the `aws_lambda` extension. By setting the following parameters (GUCs), customers will now be able to change the connect and request timeouts for AWS Lambda integration:
  - `aws_lambda.connect_timeout_ms`.
  - `aws_lambda.request_timeout_ms`.
- Fixed an issue with the calculation of the `AuroraReplicaLag` metric.
- Fixed an issue where, in rare cases, the `aws_s3` extension could fail to import from an Amazon S3 bucket with a name containing dots.
- Further reduced the database downtime during ZDP.
- Fixed a bug which can cause unavailability during ZDP.
- Fixed an issue which caused `pg_ls_waldir()` to return "ERROR: could not stat file".
- Added support for TLS 1.3 with ciphers TLS_AES_128_GCM_SHA256 and TLS_AES_256_GCM_SHA384.

- Addressed an issue that blocked a major version upgrade on the Aurora replica of an RDS for PostgreSQL DB instance.
- Fixed an issue that could prevent scaling in Aurora Serverless v2 instances.
- Fixed an issue in the `pg_vector` extension where, in rare cases, infinite or NAN values caused a crash during the index creation.
- Fixed an issue to improve the performance.
- Upgraded `GEOS` to version 3.11.2.
- Upgraded `pg_cron` to version 1.5.
- Upgraded `pg_partman` to version 4.7.3.
- Upgraded `plv8` to version 3.1.6.
- Upgraded `tds_fdw` to 2.0.3.

PostgreSQL 13.10 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 13.10. For more information about the improvements in PostgreSQL 13.10, see PostgreSQL release 13.10.

Releases and patches

- Aurora PostgreSQL 13.10.9, November 6, 2024
- Aurora PostgreSQL 13.10.8, August 7, 2024
- Aurora PostgreSQL 13.10.7, March 13, 2024
- Aurora PostgreSQL 13.10.6, December 15, 2023
- Aurora PostgreSQL 13.10.5, November 14, 2023
- Aurora PostgreSQL 13.10.4, October 5, 2023
- Aurora PostgreSQL 13.10.3, July 24, 2023
- Aurora PostgreSQL 13.10.2, May 10, 2023
- Aurora PostgreSQL 13.10.1, April 5, 2023

Aurora PostgreSQL 13.10.9, November 6, 2024

High priority enhancements

- Fixed an issue that would cause a longer restart time when `rds.enable_plan_management` is turned on, but apg_plan_mgmt extension is not installed.
- Fixed issues where the replication of vacuum operations may cause a restart when handling conflicts with user queries.
- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-7348

Aurora PostgreSQL 13.10.8, August 7, 2024

Critical stability enhancements

- Fixed a pg_repack issue causing two vacuums to concurrently process the same table.

General enhancements

- Fixed issue where minor version upgrades with ZDP would fail resulting in longer upgrade times.

Aurora PostgreSQL 13.10.7, March 13, 2024

General enhancements

- Allow `rds_superuser` to terminate backends which are not explicitly associated with a role.

High priority enhancements

- Fixed an issue that would cause a logical replication slot to transiently error out in the presence of aborted subtransactions and DDL.
- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-0985

Critical stability enhancements

- Fixed an issue related to `apg_plan_mgmt`.

- Fixed a deadlock issue in Aurora Storage which can result in writer failover.
- Fixed an issue where active transactions during logical replication slot creation may be partially replicated by the slot.

Aurora PostgreSQL 13.10.6, December 15, 2023

Critical stability enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2023-5870
  - CVE-2023-5869
  - CVE-2023-5868

General stability enhancements

- Fixed an issue with logical replication actions being performed by someone other than the table owner

Aurora PostgreSQL 13.10.5, November 14, 2023

Critical stability enhancements

- Backported a fix for the following security issue:
  - CVE-2023-38545
- Fixed an issue related to `pg_cron` background worker processes

General enhancements

- Fixed an issue that could result in read replica lag due to stale metadata
- Fixed an issue related to buffer pin locking that in rare cases can result in a crash

Aurora PostgreSQL 13.10.4, October 5, 2023

Critical stability enhancements

- Backported a fix for the following PostgreSQL community security issue:

- CVE-2023-39417

High priority enhancements

- Fixed an issue which can cause a database instance to restart while executing I/O intensive read workloads.
- Fixed an issue which can cause vacuum operations to become blocked after the restart of an Aurora replica.
- Fixed an issue that would cause high CPU usage and prevent new connections.

General enhancements

- Introduced diagnostics for the transient metadata used for I/O.

Aurora PostgreSQL 13.10.3, July 24, 2023

General enhancements

- Fixed an issue related to storage space reclamation following table drop or reindex or truncate operations.
- Fixed an issue with the calculation of the `AuroraReplicaLag` metric.
- Fixed a bug which can cause unavailability during ZDP.
- Fixed an issue that prevented reclaiming storage on transaction commits.
- Fixed an issue preventing `pglogical` from logging conflicting rows during the apply phase.
- Added Aurora Serverless v2 scaling enhancements.
- Fixed an issue where, in rare cases, the `aws_s3` extension could fail to import from an Amazon S3 bucket with a name containing dots.
- Provided options to configure the timeouts within the `aws_lambda` extension. By setting the following parameters (GUCs), customers will now be able to change the connect and request timeouts for AWS Lambda integration:
  - `aws_lambda.connect_timeout_ms`.
  - `aws_lambda.request_timeout_ms`.
- Fixed multiple issues which can cause Aurora replicas with the improved read availability feature to restart when reconnecting with the writer instance.

- Fixed an issue preventing a survivable reader reconnect.

Aurora PostgreSQL 13.10.2, May 10, 2023

General enhancements

- Fixed an error when loading the `test_decoding` plugin in `pg_create_logical_replication_slot`.
- Fixed an issue that causes logical replication to fail when using write-through cache.
- Updated the Oracle client used by the `oracle_fdw` extension to version 21.9.0.0.0.

Aurora PostgreSQL 13.10.1, April 5, 2023

New features

- Introduced a new QPM plan hash calculation for multi-schema support. If users want to use QPM in multi-schema environments, they can set the `apg_plan_mgmt.plan_hash` version to 2 and call `apg_plan_mgmt.validate_plans`('`update_plan_hash`').

General enhancements

- Upgraded `PROJ` support to version 9.1.0.
- Upgraded the `GDAL` library in `PostGIS` to version 3.5.3.
- Added support for the `TCN` and `SEG` extensions.
- Improved performance of deletes from b-tree and hash indexes on Aurora replicas.
- Includes Aurora Serverless v2 scaling enhancements.
- Fixed an issue in QPM that prevented the enforcement of approved plans when joining partitioned tables.
- Fixed an issue that caused incorrect buffer hit counts in `EXPLAIN`.
- Improved the engine startup time, particularly on large instances with many objects.
- The Aurora function `aurora_stat_logical_wal_cache()` is now visible to all users.
- Fixed an issue in QPM that could cause unavailability when enforcing plans from prepared statements.

Additional improvements and enhancements

- Updated the following extensions:
  - `hll` to version 2.17
  - `Oracle_fdw` to version 2.5.0
  - `orafce` to version 4.0.0
  - `pg_cron` to version 1.4.2
  - `pg_hint_plan` to version 1.3.8
  - `pg_logical` to version 2.4.2
  - `pg_trgm` to version 1.4
  - `pgrouting` to version 3.4.1
  - `PostGIS` to version 3.3.2
  - `SEG` to version 1.0
  - `TCN` to version 1.0
  - `wal2json` to version 2.5

PostgreSQL 13.9

This release of Aurora PostgreSQL is compatible with PostgreSQL 13.9. For more information about the improvements in PostgreSQL 13.9, see PostgreSQL release 13.9.

Releases and patches

- Aurora PostgreSQL 13.9.16, August 07, 2026
- Aurora PostgreSQL 13.9.13, June 18, 2025
- Aurora PostgreSQL 13.9.12, April 29, 2025
- Aurora PostgreSQL 13.9.10, November 18, 2024
- Aurora PostgreSQL 13.9.9, August 7, 2024
- Aurora PostgreSQL 13.9.8, March 13, 2024
- Aurora PostgreSQL 13.9.7, December 15, 2023
- Aurora PostgreSQL 13.9.6, November 17, 2023
- Aurora PostgreSQL 13.9.5, October 04, 2023
- Aurora PostgreSQL 13.9.4, September 13, 2023

- Aurora PostgreSQL 13.9.2, March 3, 2023
- Aurora PostgreSQL 13.9.0, January 20, 2023

Aurora PostgreSQL 13.9.16, August 07, 2026

Critical stability enhancements

- Fixed a bug in the aws_s3 extension which, in rare circumstances, can cause database unavailability.
- Fixed an issue in Babelfish where table-valued parameters would store only the last row N times, where N is the total number of rows provided.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2026-2003.
  - CVE-2026-2004.
  - CVE-2026-2005.
  - CVE-2026-2006.
  - CVE-2026-2007.
  - CVE-2026-3172.
  - CVE-2026-6472.
  - CVE-2026-6473.
  - CVE-2026-6474.
  - CVE-2026-6475.
  - CVE-2026-6476.
  - CVE-2026-6477.
  - CVE-2026-6478.
  - CVE-2026-6479.
  - CVE-2026-6575.
  - CVE-2026-6637.
  - CVE-2026-6638.

Security enhancements

- Improved permission validation in the babelfish_set_role function when setting roles.

General enhancements

- Fixed an issue to reduce CPU overhead while establishing Encryption in Transit between the database engine and the storage layer.
- Fixed an issue where ALTER FUNCTION might fail with "routine name is not unique."

Aurora PostgreSQL 13.9.13, June 18, 2025

Critical stability enhancements

- Fixed an issue related to the interaction between Aurora Serverless scaling and the improved reader availability functionality that might result in longer recovery times and impact availability.
- Fixed an issue in the `rds_activity_stream` extension that could cause brief periods of unavailability during configuration reloads and when maximum connections are consumed.

General enhancements

- Added support for newly released AWS Regions in the aws_s3 extension.
- Fixed an issue where unexpected internal communication channel re-establishments might cause increased latency on data processing.

Aurora PostgreSQL 13.9.12, April 29, 2025

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-1094.

Aurora PostgreSQL 13.9.10, November 18, 2024

High priority enhancements

- Fixed an issue that would cause a longer restart time when `rds.enable_plan_management` is turned on, but apg_plan_mgmt extension is not installed.
- Fixed issues where the replication of vacuum operations might cause a restart when handling conflicts with user queries.
- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-7348.

Aurora PostgreSQL 13.9.9, August 7, 2024

Critical stability enhancements

- Fixed a pg_repack issue causing two vacuums to concurrently process the same table.
- Fixed a V8 Engine CVE-2018-6065 for PLV8 2.x.

General enhancements

- Fixed issue where minor version upgrades with ZDP would fail resulting in longer upgrade times.

Aurora PostgreSQL 13.9.8, March 13, 2024

General enhancements

- Allow `rds_superuser` to terminate backends which are not explicitly associated with a role.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-0985.

Critical stability enhancements

- Fixed an issue related to `apg_plan_mgmt`.

- Fixed a deadlock issue in Aurora Storage which can result in writer failover.
- Fixed an issue where the slot might partially replicate active transactions during logical replication slot creation.

Aurora PostgreSQL 13.9.7, December 15, 2023

Critical stability enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2023-5870.
  - CVE-2023-5869.
  - CVE-2023-5868.

General stability enhancements

- Fixed an issue where someone other than the table owner performed logical replication actions.

Aurora PostgreSQL 13.9.6, November 17, 2023

Critical stability enhancements

- Backported a fix for the following security issue:
  - CVE-2023-38545.
- Fixed an issue related to `pg_cron` background worker processes.

Aurora PostgreSQL 13.9.5, October 04, 2023

Critical stability enhancements

- Backported a fix for the following PostgreSQL community security issue:
  - CVE-2023-2455.
  - CVE-2023-2454.

High priority stability enhancements

- Fixed an issue which blocked vacuum operations after the restart of an Aurora replica.

- Fixed an issue which can cause a database instance to restart while executing IO intensive read workloads.
- Fixed an issue that would cause high CPU usage and prevent new connections.

General enhancements

- Introduced diagnostics for the transient metadata used for I/O.

Aurora PostgreSQL 13.9.4, September 13, 2023

General enhancements

- Added Aurora Serverless v2 scaling enhancements.
- Fixed an issue in `pg_cron` which can prevent scaling in Aurora Serverless v2.
- Fixed an issue with the calculation of the `AuroraReplicaLag` metric.
- Fixed a bug which can cause unavailability during ZDP.
- Fixed an issue preventing `pglogical` from logging conflicting rows during the apply phase.
- Fixed an issue where, in rare cases, the `aws_s3` extension could fail to import from an Amazon S3 bucket with a name containing dots.
- Provided options to configure the timeouts within the `aws_lambda` extension. By setting the following parameters, you can now change the connect and request timeouts for AWS Lambda integration:
  - `aws_lambda.connect_timeout_ms`.
  - `aws_lambda.request_timeout_ms`.

Aurora PostgreSQL 13.9.2, March 3, 2023

Critical stability enhancements

- Backported a fix for the following PostgreSQL community security issue:
  - CVE-2022-41862.

General stability enhancements

- Fixed an issue where the approved plans for joins with partitioned tables weren't being enforced.

- Fixed an issue in PostGIS where the GDAL data wasn't loading.
- Fixed an issue that increased the amount of recovery work during startup if logical replication is enabled.
- Fixed an issue with the aws_s3 extension where loading a large number of records can time out.
- Fixed an issue that causes logical replication to fail when using write-through cache.

Aurora PostgreSQL 13.9.0, January 20, 2023

High priority stability enhancements

- Fixed an issue where an upgrade fails because the oldest MultiXactId is updated incorrectly.
- Fixed an issue where the commit latency metrics weren't updated.
- Fixed an issue that could lead to a brief period of unavailability.

General stability enhancements

- Fixed an issue that caused DB instance migration failures.
- Fixed an issue where the DB fails to start because of an inconsistency in the metadata.
- Improved the error handling and diagnosability.
- Upgraded the RDKit extension to version 4.2.
- Upgraded the GDAL library to version 3.4.3.
- Fixed an issue where the cluster cache management process doesn't shutdown gracefully.
- Fixed an issue that can cause certain processes to linger in an inconsistent state during a clean shutdown.
- Fixed an issue with the pg_repack extension.
- Improved the collation library (glibc) handling with a new independent default collation library.

PostgreSQL 13.8 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 13.8. For more information about the improvements in PostgreSQL 13.8, see PostgreSQL release 13.8.

Releases and patches

- Aurora PostgreSQL 13.8.8, November 22, 2024

- Aurora PostgreSQL 13.8.7, August 7, 2024
- Aurora PostgreSQL 13.8.6, March 13, 2024
- Aurora PostgreSQL 13.8.5, December 18, 2023
- Aurora PostgreSQL 13.8.4, November 17, 2023
- Aurora PostgreSQL 13.8.3, October 17, 2023
- Aurora PostgreSQL 13.8.2, March 2, 2023
- Aurora PostgreSQL 13.8.1, December 13, 2022
- Aurora PostgreSQL 13.8.0, November 09, 2022

Aurora PostgreSQL 13.8.8, November 22, 2024

High priority enhancements

- Fixed an issue that would cause a longer restart time when `rds.enable_plan_management` is turned on, but apg_plan_mgmt extension is not installed.
- Fixed issues where the replication of vacuum operations may cause a restart when handling conflicts with user queries.

Aurora PostgreSQL 13.8.7, August 7, 2024

Critical stability enhancements

- Fixed a pg_repack issue causing two vacuums to concurrently process the same table.

General enhancements

- Fixed issue where minor version upgrades with ZDP would fail resulting in longer upgrade times.

Aurora PostgreSQL 13.8.6, March 13, 2024

General enhancements

- Allow `rds_superuser` to terminate backends which are not explicitly associated with a role.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-0985

Critical stability enhancements

- Fixed an issue related to `apg_plan_mgmt`.
- Fixed a deadlock issue in Aurora Storage which can result in writer failover.
- Fixed an issue where active transactions during logical replication slot creation may be partially replicated by the slot.

Aurora PostgreSQL 13.8.5, December 18, 2023

Critical stability enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2023-5870
  - CVE-2023-5869
  - CVE-2023-5868

General stability enhancements

- Fixed an issue with logical replication actions being performed by someone other than the table owner

Aurora PostgreSQL 13.8.4, November 17, 2023

Critical stability enhancements

- Backported a fix for the following security issue:
  - CVE-2023-38545
- Fixed an issue related to `pg_cron` background worker processes

Aurora PostgreSQL 13.8.3, October 17, 2023

High priority stability enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2023-39417
  - CVE-2023-2455
  - CVE-2023-2454
  - CVE-2022-41862

High priority enhancements

- Fixed an issue which blocked vacuum operations after the restart of an Aurora replica.
- Fixed an issue that would cause high CPU usage and prevent new connections.

General stability enhancements

- Fixed an issue which causes the stats collector process to repeatedly restart.
- Improved the scale times for Aurora Serverless v2.
- Fix a bug which can cause unavailability during ZDP.
- Fixed an issue preventing `pglogical` from logging conflicting rows during the apply phase.
- Fixed an issue where, in rare cases, the `aws_s3` extension could fail to import from an S3 bucket with a name containing dots.
- Provided options to configure the timeouts within the `aws_lambda` extension. By setting the following parameters, customers will now be able to change the connect and request timeouts for AWS Lambda integration:
  - `aws_lambda.connect_timeout_ms`.
  - `aws_lambda.request_timeout_ms`.
- Fixed an issue which can cause a database instance to restart while executing I/O intensive read workloads.
- Fixed an issue that causes logical replication to fail when using write-through cache

Aurora PostgreSQL 13.8.2, March 2, 2023

General stability enhancements

- Fixed an issue where the approved plans for joins with partitioned tables weren't being enforced.
- Fixed an issue that increased the amount of recovery work during startup if logical replication is enabled.
- Fixed an issue with the `aws_s3` extension where loading a large number of records can time out.
- Fixed an issue with the `pg_cron` parallel running of tasks.

Aurora PostgreSQL 13.8.1, December 13, 2022

General stability enhancements

- Fixed an issue that can cause increased network traffic when a writer instance transmits logs to a replica instance.
- Fixed an issue where the engine experiences stability issues during database minor and patch release upgrades.
- Fixed an issue that could cause data inconsistency during replication.

Aurora PostgreSQL 13.8.0, November 09, 2022

High priority stability enhancements

- Fixed an Aurora Serverless v2 scaling issue.
- Fixed an issue which caused Aurora Serverless v2 shrink failure.

General stability enhancements

- Improved buffer cache scavenging when the buffer cache is in duress.
- Fixed an issue in Database Activity Streams that leads to high memory consumption.
- Fixed an issue that caused DB instance restarts.
- Fixed an issue where a DB instance restarts recursively while generating monitoring metrics during a crash.
- Fixed an issue where a DB instance restarted during performance metric collection.

- Fixed an issue where an attempt to connect to the database would fail with SSLV3_ALERT_CERTIFICATE_UNKNOWN.
- Improved the error reporting in case of an inconsistent B-tree index.
- Improved the diagnostic logging around setting invalid hint bits.
- Fixed an issue where autovacuum would incorrectly skip tables.
- Improved the logical replication prefetching.
- Fixed a durability issue in the GIN indexes.
- Provided options to configure MultiXact SLRU cache. By setting the following parameters (GUCs), customers will now be able to change the MultiXact SLRU cache sizes:
  - multixact_members_cache_size
  - multixact_offsets_cache_size
- Fixed an issue to detect and cancel stuck major version upgrades.
- Fixed an issue in hash join that could lead to increased memory consumption.
- Improved the logical replication performance.
- Fixed an issue that causes database activity stream inconsistency when the monitoring agent is unavailable.
- Upgraded the `GEOS` version to 3.10.3.
- Updated the `PLV8` version to 3.0.0.
- Updated the `PostGIS` extension to version 3.2.3.
- Fixed an issue with `st_orientedenvelope` that caused it to loop with a 1-D input to return 0.
- Fixed an issue where the connection to SQL Server using tds_fdw fails.

PostgreSQL 13.7 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 13.7. For more information about the improvements in PostgreSQL 13.7, see PostgreSQL 13.7.

Releases and patches

- Aurora PostgreSQL 13.7.11, November 20, 2024
- Aurora PostgreSQL 13.7.10, August 7, 2024
- Aurora PostgreSQL 13.7.9, March 13, 2024
- Aurora PostgreSQL 13.7.8, December 22, 2023

- Aurora PostgreSQL 13.7.7, November 17, 2023
- Aurora PostgreSQL 13.7.6, October 19, 2023
- Aurora PostgreSQL 13.7.5, December 14, 2022
- Aurora PostgreSQL 13.7.4, November 17, 2022
- Aurora PostgreSQL 13.7.3, October 13, 2022
- Aurora PostgreSQL 13.7.1, July 6, 2022
- Aurora PostgreSQL 13.7.0, June 9, 2022

Aurora PostgreSQL 13.7.11, November 20, 2024

High priority enhancements

- Fixed an issue that would cause a longer restart time when `rds.enable_plan_management` is turned on, but apg_plan_mgmt extension is not installed.
- Fixed issues where the replication of vacuum operations may cause a restart when handling conflicts with user queries.
- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-7348

Aurora PostgreSQL 13.7.10, August 7, 2024

Critical stability enhancements

- Fixed a pg_repack issue causing two vacuums to concurrently process the same table.
- Fixed a V8 Engine CVE-2018-6065 for PLV8 2.x.

General enhancements

- Fixed issue where minor version upgrades with ZDP would fail resulting in longer upgrade times.

Aurora PostgreSQL 13.7.9, March 13, 2024

General enhancements

- Allow `rds_superuser` to terminate backends which are not explicitly associated with a role.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-0985

Critical stability enhancements

- Fixed an issue related to `apg_plan_mgmt`.
- Fixed a deadlock issue in Aurora Storage which can result in writer failover.
- Fixed an issue where active transactions during logical replication slot creation may be partially replicated by the slot.

Aurora PostgreSQL 13.7.8, December 22, 2023

Critical stability enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2023-5870
  - CVE-2023-5869
  - CVE-2023-5868

General stability enhancements

- Fixed an issue with logical replication actions being performed by someone other than the table owner

Aurora PostgreSQL 13.7.7, November 17, 2023

Critical stability enhancements

- Backported a fix for the following security issue:
  - CVE-2023-38545
- Fixed an issue related to `pg_cron` background worker processes

Aurora PostgreSQL 13.7.6, October 19, 2023

High priority stability enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2023-39417
  - CVE-2023-2455
  - CVE-2023-2454
  - CVE-2022-41862
  - CVE-2022-2625

High priority enhancements

- Fixed an issue which blocked vacuum operations after the restart of an Aurora replica.
- Fixed an issue that would cause high CPU usage and prevent new connections.

General stability enhancements

- Fixed an issue which causes the stats collector process to repeatedly restart.
- Improved the scale times for Aurora Serverless v2.
- Fix a bug which can cause unavailability during ZDP.
- Fixed an issue preventing `pglogical` from logging conflicting rows during the apply phase.
- Fixed an issue where, in rare cases, the `aws_s3` extension could fail to import from an S3 bucket with a name containing dots.
- Provided options to configure the timeouts within the `aws_lambda` extension. By setting the following parameters, customers will now be able to change the connect and request timeouts for AWS Lambda integration:
  - `aws_lambda.connect_timeout_ms`.
  - `aws_lambda.request_timeout_ms`.

Aurora PostgreSQL 13.7.5, December 14, 2022

General stability enhancements

- Fixed an issue where the engine experiences stability issues during database minor and patch release upgrades.
- Fixed an issue that causes database activity stream inconsistency when the monitoring agent is unavailable.
- Fixed an issue that could cause data inconsistency during replication.

Aurora PostgreSQL 13.7.4, November 17, 2022

High priority stability enhancements

- Fixed an issue that can cause increased network traffic when a writer instance transmits logs to a replica instance.

Aurora PostgreSQL 13.7.3, October 13, 2022

High priority stability enhancements

- Fixed a `PLV8` issue where the base parameter doesn't get loaded properly into the memory.
- Fixed an issue where scaling an Aurora Serverless v2 instance gets stuck if VACUUM is running.

General stability enhancements

- Fixed a bug where Aurora PostgreSQL can't file the relfilenode.
- Fixed a database restart issue when a plan gets invaliated but the engine still checks if it is valid.
- Fixed a stuck scaling issue when the current scaling events time out.
- Upgraded the `PostGIS` extension to version 3.1.7.
- Fixed an issue where extended query messages might be lost during zero-downtime patching (ZDP) causing the extended query to hang after the ZDP completion.

Aurora PostgreSQL 13.7.1, July 6, 2022

Critical stability enhancements

- Fixed an issue that could cause periods of unavailability during a storage node restart.

High priority stability enhancements

- Fixed an error handling issue related to out-of-memory conditions which could result in brief periods of unavailability.
- Fixed an issue when the connection to SQL Server fails using the `TDS_FDW` extension to query a foreign table.
- Fixed an issue that caused connections using the provided root certificate to fail.
- Improved the diagnostic and supportability information in case of inconsistent B-tree index entries.

Aurora PostgreSQL 13.7.0, June 9, 2022

New features

- Added support for the `large object` module (extension). For more information, see Managing large objects with the lo module.
- Added support for zero-downtime patching (ZDP) for minor version upgrades and patches. For more information, see Minor release upgrades and zero-downtime patching in the *Amazon Aurora User Guide*.

Critical updates

- Fixed a replay crash due to an LSN mismatch
- Fixed the `aws_s3` extension to prevent invalid region injection

High stability updates

- Fixed multiple issues related to out-of-memory conditions which could result in brief periods of unavailability
- Fixed an Aurora Serverless v2 scaling issue.

General enhancements

- Fixed a lock contention crash during an Aurora Serverless v1 scaling event.
- Fixed an issue where logical replication becomes stuck after a restart.
- Fixed multiple issues that could lead to brief periods of unavailability.
- Fixed a crash in `pg_cron` due to a task still running but being unscheduled.
- Fixed, during redo, an invalid page hit on the Generic Redo for GENERIC_XLOG_FULL_PAGE_DATA. This happens due to a timing hole between generating the log record and then writing the metadata for the record on the RW node and the RO node replays between those operations.
- Improved the query performance by supporting parallel workers.
- Upgraded the plugin `wal2json` version to 2.4.
- Upgraded the `pglogical` extension to version 2.4.1.

PostgreSQL 13.6 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 13.6. For more information about the improvements in PostgreSQL 13.6, see PostgreSQL release 13.6.

Releases and patches

- Aurora PostgreSQL 13.6.6, December 16, 2022
- Aurora PostgreSQL 13.6.5, October 18, 2022
- Aurora PostgreSQL 13.6.4, July 18, 2022
- Aurora PostgreSQL 13.6.3, June 2, 2022
- Aurora PostgreSQL 13.6.2, May 12, 2022
- Aurora PostgreSQL 13.6.1, April 27, 2022
- Aurora PostgreSQL 13.6.0, March 29, 2022

Aurora PostgreSQL 13.6.6, December 16, 2022

General enhancements

- Fixed an issue that can cause increased network traffic when a writer instance transmits logs to a replica instance.

- Fixed an issue that causes database activity stream inconsistency when the monitoring agent is unavailable.

Aurora PostgreSQL 13.6.5, October 18, 2022

High priority enhancements

- Fixed an issue where Amazon Aurora Serverless v2 scaling may get blocked if VACUUM is running.
- Fixed an issue where Amazon Aurora Serverless v2 scaling may get blocked on Aurora replicas.

General enhancements

- Improved the diagnostic and supportability information in case of inconsistent B-tree index entries.
- Updated the PostGIS extension to version 3.1.7.

Aurora PostgreSQL 13.6.4, July 18, 2022

Security enhancements

- Backpatched the PostgreSQL community fix for CVE-2022-1552: Autovacuum, REINDEX, and others omit "security restricted operation". For more information, see CVE-2022-1552.

Critical enhancements

- Fixed an issue during a storage node restart that could result in periods of unavailability.

High priority stability enhancements

- Fixed an error handling issue related to out-of-memory conditions that could result in brief periods of unavailability.
- Fixed an issue related to the existence of duplicate relation files that could result in periods of unavailability.
- Fixed a defect where the validation of cached plans may lead to a database restart when the plan was previously invalidated.

Aurora PostgreSQL 13.6.3, June 2, 2022

Security enhancements

- Backpatched the PostgreSQL community fix for CVE-2022-1552: Autovacuum, REINDEX, and others omit "security restricted operation". For more information, see CVE-2022-1552.

High priority stability updates

- Fixed an issue that can lead to a blocked scale operation when a `COPY` command is in progress in Amazon Aurora Serverless v2.
- Fixed an issue that can cause a restart of the database when dropping or truncating tables in Amazon Aurora Serverless v2.
- Fixed an issue in the `apg_prewarm` extension that can lead to a blocked scale operation in Amazon Aurora Serverless v2.
- Fixed an issue in the dynamic shared memory allocation that can lead to a blocked scale operation in Amazon Aurora Serverless v2.
- Fixed an issue that can cause a restart of the postmaster process in Amazon Aurora Serverless v2.
- Fixed an issue where a minor version ugprade may get blocked when there is a SQL view that refers to the `checksum()` function in Babelfish for Aurora PostgreSQL.
- Fixed an issue in `apg_plan_mgmt` that can cause a restart when Query Plan Management (QPM) is enabled.

Aurora PostgreSQL 13.6.2, May 12, 2022

High priority stability enhancements

- Fixed an issue that causes upgrades to fail when Babelfish for Aurora PostgreSQL is enabled.
- Fixed an issue that causes scaling in Aurora Serverless v2 to fail.

General enhancements

- Fixed an issue that could cause unavailability due to improper locking of shared memory.

Aurora PostgreSQL 13.6.1, April 27, 2022

High priority stability enhancements

- Fixed an issue that could cause incorrect `WriteIOPS` reporting in the AWS console.
- Fixed an issue that could cause unavailability after removal of a read node from a cluster.

General enhancements

- Fixed an issue that could cause an engine restart during periods of low free memory.

Aurora PostgreSQL 13.6.0, March 29, 2022

New features

- Added support for the `tds_fdw` extension version 2.0.2.

High priority stability enhancements

- Fixed multiple issues that may result in unavailability of a read node.
- Fixed an issue that may result in a read node being unable to replay WAL requiring the replication slot to be dropped and resynchronized.
- Fixed an issue that could cause excess storage use due to files not being properly closed.

General enhancements

- Fixed a small memory leak on read nodes when `commit_ts` is set.
- Fixed an issue that caused Performance Insights to show "Unknown wait event".
- Fixed an issue that could cause an import from Amazon S3 to fail when using the `aws_s3` extension
- Fixed multiple issues that could result in periods of unavailability when using `apg_plan_mgmt`
- Fixed multiple issues that could result in periods of unavailability when QPM is enabled

PostgreSQL 13.5 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 13.5. For more information about the improvements in PostgreSQL 13.5, see PostgreSQL release 13.5.

Releases and patches

- Aurora PostgreSQL 13.5.7, August 24, 2023
- Aurora PostgreSQL 13.5.6, December 16, 2022
- Aurora PostgreSQL 13.5.5, October 18, 2022
- Aurora PostgreSQL 13.5.4, July 20, 2022
- Aurora PostgreSQL 13.5.3, April 13, 2022
- Aurora PostgreSQL 13.5.1, March 3, 2022
- Aurora PostgreSQL 13.5.0, February 25, 2022

Aurora PostgreSQL 13.5.7, August 24, 2023

General enhancements

- Fixed an issue which causes the stats collector process to repeatedly restart.
- Fixed an issue preventing `pglogical` from logging conflicting rows during the apply phase.

Aurora PostgreSQL 13.5.6, December 16, 2022

General enhancements

- Fixed an issue that can cause increased network traffic when a writer instance transmits logs to a replica instance.
- Fixed an issue that causes database activity stream inconsistency when the monitoring agent is unavailable.

Aurora PostgreSQL 13.5.5, October 18, 2022

General enhancements

- Improved the diagnostic and supportability information in case of inconsistent B-tree index entries.

- Updated the PostGIS extension to version 3.1.7.

Aurora PostgreSQL 13.5.4, July 20, 2022

Security enhancements

- Backpatched the PostgreSQL community fix for CVE-2022-1552: Autovacuum, REINDEX, and others omit "security restricted operation". For more information, see CVE-2022-1552.

Critical enhancements

- Fixed an issue during a storage node restart that could result in periods of unavailability.

High stability enhancements

- Fixed an error handling issue related to out-of-memory conditions that could result in brief periods of unavailability.
- Fixed an issue related to the existence of duplicate relation files that could result in periods of unavailability.
- Fixed an issue that could cause excess storage use due to files not being properly closed.
- Fixed an issue that can cause a restart of the postmaster process in Amazon Aurora Serverless v2.
- Fixed an issue that caused Performance Insights to show "Unknown wait event".

Aurora PostgreSQL 13.5.3, April 13, 2022

Security enhancements

- Additional modifications to the `pg_cron` extension to mitigate a security issue during create extension. The issue was addressed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.

General enhancements

- Fixed a bug that could cause an engine restart during periods of low free memory.

Aurora PostgreSQL 13.5.1, March 3, 2022

Security enhancements

- Updated the `PostGIS` extension from version 3.1.4 to 3.1.5. This update contains a PostGIS fix for the vulnerability addressed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.
- Modified the `ip4r` extension to mitigate a security issue during create extension. The issue was originally disclosed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.
- Modified the `pg_bigm` extension to mitigate a security issue during create extension. The issue was addressed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.
- Modified the `pg_cron` extension to mitigate a security issue during create extension. The issue was addressed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.

Aurora PostgreSQL 13.5.0, February 25, 2022

High priority stability enhancements

- Fixed a bug where logical replication may hang resulting in the replay falling behind on the read node. The instance may eventually restart.

Additional improvements and enhancements

- Added the `Buffers: shared hit` metric to the Explain output.
- Fixed a buffer cache bug that could cause brief periods of unavailability.
- Fixed a bug in the `apg_plan_mgmt` extension where an index based plan was not being enforced.
- Fixed a bug in the `pg_logical` extension that could cause brief periods of unavailability due to improper handling of `NULL` arguments.
- Fixed a bug that could cause brief periods of unavailability due to reading uninitialized pages.
- Fixed an issue where orphaned files caused major version upgrades to fail.
- Fixed incorrect Aurora Storage Daemon log write metrics.

- Fixed multiple bugs that could result in `WAL` replay falling behind and eventually causing the reader instances to restart.
- Improved the Aurora buffer cache page validation on reads.
- Improved the Aurora storage metadata validation.

This version also includes the following change:

- The pg_cron extension is updated to 1.4.1

For information about extensions and modules, see Extensions supported for Aurora PostgreSQL 13.

PostgreSQL 13.4 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 13.4. For more information about the improvements in PostgreSQL 13.4, see PostgreSQL release 13.4.

Releases and patches

- Aurora PostgreSQL 13.4.6, December 19, 2022
- Aurora PostgreSQL 13.4.5, October 18, 2022
- Aurora PostgreSQL 13.4.4, July 6, 2022
- Aurora PostgreSQL 13.4.2, April 12, 2022
- Aurora PostgreSQL 13.4.1
- Aurora PostgreSQL 13.4.0

Aurora PostgreSQL 13.4.6, December 19, 2022

General enhancements

- Fixed an issue that causes database activity stream inconsistency when the monitoring agent is unavailable.

Aurora PostgreSQL 13.4.5, October 18, 2022

General enhancements

- Improved the diagnostic and supportability information in case of inconsistent B-tree index entries.
- Updated the `PostGIS` extension to version 3.1.7.

Aurora PostgreSQL 13.4.4, July 6, 2022

Security enhancements

- Backpatched the PostgreSQL community fix for CVE-2022-1552: Autovacuum, REINDEX, and others omit "security restricted operation". For more information, see CVE-2022-1552.

General enhancements

- Fixed an error handling issue related to out-of-memory conditions which could result in brief periods of unavailability.
- Fixed an issue that could cause excess storage use due to files not being properly closed.
- Fixed an issue that could cause a restart of the postmaster process in Amazon Aurora Serverless v2.
- Fixed an issue that could cause Performance Insights to display "Unknown wait event".
- Fixed an issue that could result in periods of unavailability due to the existence of duplicate relation files.

Aurora PostgreSQL 13.4.2, April 12, 2022

Security enhancements

- Additional modifications to the `pg_cron` extension to mitigate a security issue during create extension. The issue was addressed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.

General enhancements

- Fixed a buffer cache bug that could cause brief periods of unavailability.

Aurora PostgreSQL 13.4.1

Security enhancements

- Updated the `PostGIS` extension from version 3.1.4 to 3.1.5. This update contains a `PostGIS` fix for the vulnerability addressed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.
- Modified the `ip4r` extension to mitigate a security issue during create extension. The issue was originally disclosed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.
- Modified the `pg_bigm` extension to mitigate a security issue during create extension. The issue was addressed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.
- Modified the `pg_cron` extension to mitigate a security issue during create extension. The issue was addressed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.

Aurora PostgreSQL 13.4.0

New features

- This version supports Babelfish 1.0.0 which extends your Amazon Aurora PostgreSQL database with the ability to accept database connections from Microsoft SQL Server clients. For more information, see Working with Babelfish for Aurora PostgreSQL.

Critical stability enhancements

- Fixed an issue where, in rare circumstances, a data cache of a read node may be inconsistent following a restart of that node.

High priority stability enhancements

- Fixed an issue where queries may become unresponsive due to I/O resource exhaustion triggered by prefetch.
- Fixed an issue where Aurora may flag an issue following a major version update with the message: "PANIC: could not access status of next transaction id xxxxxxxx".

Additional improvements and enhancements

- Fixed an issue which can cause vacuum operations to become blocked after all Aurora read replicas have been removed from a secondary cluster.
- Fixed an issue where read nodes restart due to a replication origin cache lookup failure.
- Fixed an issue where read queries may time out on read nodes during the replay of lazy truncation triggered by vacuum on the write node.
- Fixed an issue that causes Performance Insights to incorrectly set the backend type of a database connection.
- Fixed an issue where the aurora_postgres_replica_status() function returned stale or lagging CPU stats.
- Fixed an issue where the role `rds_superuser` did not have permission to execute the `pg_stat_statements_reset()` function.
- Fixed an issue with the `apg_plan_mgmt` extension where the planning and execution times were reported as 0.
- Removed support for the DES, 3DES, and RC4 cipher suites.
- Updated the `PostGIS` extension to version 3.1.4.
- Updated the `pgrouting` extension to 3.1.3.
- Updated the `pglogical` extension to 2.4.0.
- Added support for the following SPI module extensions:
  - `autoinc version 1.0`
  - `insert_username version 1.0`
  - `moddatetime version 1.0`
  - `refint version 1.0`
- Fixed multiple issues in the Aurora storage daemon that could lead to brief periods of unavailability when specific network configurations are used.
- Fixed an out-of-memory crash issue with Aurora storage daemon that leads to writer node restart. This also reduces the overall system memory consumption.

PostgreSQL 13.3 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 13.3. For more information about the improvements in PostgreSQL 13.3, see PostgreSQL release 13.3.

Releases and patches

- Aurora PostgreSQL 13.3.5, December 30, 2022
- Aurora PostgreSQL 13.3.4, July 14, 2022
- Aurora PostgreSQL 13.3.3, April 7, 2022
- Aurora PostgreSQL 13.3.2
- Aurora PostgreSQL 13.3.1
- Aurora PostgreSQL 13.3.0

Aurora PostgreSQL 13.3.5, December 30, 2022

General enhancements

- Fixed an issue that causes database activity stream inconsistency when the monitoring agent is unavailable.

Aurora PostgreSQL 13.3.4, July 14, 2022

Security enhancements

- Backpatched the PostgreSQL community fix for CVE-2022-1552: Autovacuum, REINDEX, and others omit "security restricted operation". For more information, see CVE-2022-1552.

High priority stability enhancements

- Fixed an error handling issue related to out-of-memory conditions which could result in brief periods of unavailability.
- Fixed an issue that could cause excess storage use due to files not being properly closed.
- Fixed an issue that caused Performance Insights to show "Unknown wait event".

Aurora PostgreSQL 13.3.3, April 7, 2022

Security enhancements

- Includes additional modifications to the `pg_cron` extension to mitigate a security issue during create extension. The issue was addressed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.

Aurora PostgreSQL 13.3.2

Security enhancements

- Modified the `pg_cron` extension to mitigate a security issue during create extension. The issue was addressed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.
- Modified the `ip4r` extension to mitigate a security issue during create extension. The issue was originally disclosed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.
- Backpatched postgis to `PostGIS` 3.0.3. This is a `PostGIS` fix for the vulnerability addressed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.

Aurora PostgreSQL 13.3.1

Security enhancements

- Modified the `pg_bigm` extension to mitigate a security issue during create extension. The issue was addressed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.

Critical stability enhancements

- Fixed an issue where, in rare circumstances, a data cache of a read node may be inconsistent following a restart of that node.

High priority stability enhancements

- Fixed an issue where queries may become unresponsive due to I/O resource exhaustion triggered by prefetch.
- Fixed an issue where Aurora may flag an issue following a major version update with the message: "PANIC: could not access status of next transaction id xxxxxxxx".

Additional improvements and enhancements

- Fixed an issue where read nodes restart due to a replication origin cache lookup failure.

- Fixed an issue with the `apg_plan_mgmt` extension where the planning and execution times were reported as 0.
- Fixed an issue that causes Performance Insights to incorrectly set the backend type of a database connection.
- Fixed an issue with the `apg_plan_mgmt` extension where plan outline on a partitioned table did not enforce an index-based plan.
- Fixed an issue where orphaned files caused failed translations in read codepaths during or after a major version upgrade.
- Fixed multiple issues in the Aurora storage daemon that could lead to brief periods of unavailability when specific network configurations are used.
- Fixed an out-of-memory crash issue with Aurora storage daemon that leads to writer node restart. This also reduces the overall system memory consumption.

Aurora PostgreSQL 13.3.0

New features

- Supports a major version upgrade from Aurora PostgreSQL 4.0.0 and later versions
- Supports `bool_plperl` version 1.0
- Supports `rds_tools` version 1.0

Critical stability enhancements

- Fixed an issue where, in rare circumstances, a data cache of a read node may be inconsistent following a restart of that node.

Additional improvements and enhancements

- Contains several improvements that were announced for PostgreSQL releases 13.0, 13.1, 13.2 and 13.3
- Instance type R4 was deprecated.
- Updated the following extensions:
  - `hll` to version 2.15.
  - `hstore` to version 1.7.

- `intarray` to version 1.3.
- `log_fdw` to version 1.2.
- `ltree` to version 1.2.
- `pg_hint_plan` to version 1.3.7.
- `pg_repack` to version 1.4.6.
- `pg_stat_statements` to version 1.8.
- `pg_trgm` to version 1.5.
- `pgaudit` to version 1.5.
- `pglogical` to version 2.3.3.
- `pgrouting` to version 3.1.0
- `plcoffee` to version 2.3.15.
- `plls` to version 2.3.15.
- `plv8` to version 2.3.15.

PostgreSQL 12 versions (includes some deprecated versions)

Version updates

- PostgreSQL 12.22
- PostgreSQL 12.20 (Deprecated)
- PostgreSQL 12.19 (Deprecated)
- PostgreSQL 12.18 (Deprecated)
- PostgreSQL 12.17 (Deprecated)
- PostgreSQL 12.16 (Deprecated)
- PostgreSQL 12.15 (Deprecated)
- PostgreSQL 12.14 (Deprecated)
- PostgreSQL 12.13 (Deprecated)
- PostgreSQL 12.12 (Deprecated)
- PostgreSQL 12.11 (Deprecated)
- PostgreSQL 12.10 (Deprecated)
- PostgreSQL 12.9

- PostgreSQL 12.8 (Deprecated)
- PostgreSQL 12.7, Aurora PostgreSQL 4.2 (Deprecated)
- PostgreSQL 12.6, Aurora PostgreSQL 4.1 (Deprecated)
- PostgreSQL 12.4, Aurora PostgreSQL 4.0 (Deprecated)

PostgreSQL 12.22

This release of Aurora PostgreSQL is compatible with PostgreSQL 12.22. For more information about the improvements in PostgreSQL 12.22, see PostgreSQL release 12.22.

Releases and patches

- Aurora PostgreSQL 12.22.8, August 06, 2026
- Aurora PostgreSQL 12.22.7, January 28, 2026
- Aurora PostgreSQL 12.22.6, November 13, 2025
- Aurora PostgreSQL 12.22.5, June 24, 2025
- Aurora PostgreSQL 12.22.4, March 24, 2025
- Aurora PostgreSQL 12.22.3, February 13, 2025
- Aurora PostgreSQL 12.22.2, January 20, 2025
- Aurora PostgreSQL 12.22.1, December 27, 2024
- Aurora PostgreSQL 12.22, December 27, 2024

Aurora PostgreSQL 12.22.8, August 06, 2026

Critical stability enhancements

- Fixed a bug in the aws_s3 extension which, in rare circumstances, can cause database unavailability.
- Fixed an issue where read nodes may restart when attempting to connect to the new write node following a failover.
- Fixed an issue in Babelfish where table-valued parameters would store only the last row N times, where N is the total number of rows provided.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2026-2003.
  - CVE-2026-2004.
  - CVE-2026-2005.
  - CVE-2026-2006.
  - CVE-2026-2007.
  - CVE-2026-3172.
  - CVE-2026-6472.
  - CVE-2026-6473.
  - CVE-2026-6474.
  - CVE-2026-6475.
  - CVE-2026-6476.
  - CVE-2026-6477.
  - CVE-2026-6478.
  - CVE-2026-6479.
  - CVE-2026-6575.
  - CVE-2026-6637.
  - CVE-2026-6638.
- Fixed a bug in the Aurora Storage Daemon that could cause database unavailability in rare cases when enhanced logical replication is enabled.
- Babelfish now restricts GRANT/REVOKE on any Babelfish created role via the PG port.
- Fixed an issue that can result in reader crash during catching up with the writer instance.

Security enhancements

- Fixed an issue in the babelfish_set_role function that caused incorrect permission validation when setting roles.

General enhancements

- Fixed an issue to reduce CPU overhead while establishing Encryption in Transit between the database engine and the storage layer.

- Fixed an issue where correlated any transform could return an error message "failed to build any 3-way joins" during transformation.
- Fixed an issue where ALTER FUNCTION could fail with "routine name is not unique".
- Fixed an issue where GRANT SET ON PARAMETER incorrectly allowed permissions to be granted for non-existent extension parameters.

Aurora PostgreSQL 12.22.7, January 28, 2026

Critical stability enhancements

- Fixed an issue that could cause garbage collection to get blocked on a change data capture (CDC) volume.
- Fix an issue which could trigger a race in change data capture (CDC) volume expansion.
- Process cleanup improvements during zero downtime patching to ensure that all database processes are properly terminated, preventing shutdown stalls and improving zero downtime patching success.
- Fixed an Issue that could cause readers to restart or readers cannot perform read operations due to missing storage segments.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-12817.
  - CVE-2025-12818.
- Fixed an issue where premature status updates during zero downtime patching could cause unnecessary failures by ensuring proper synchronization with server startup.

General enhancements

- Fixed IMDS throttling issues by reducing IMDS requests for region related information.

Aurora PostgreSQL 12.22.6, November 13, 2025

Critical stability enhancements

- Fixed an issue in engine minor and patch upgrades where in rare cases a backend can incorrectly process an interrupt early.
- Fixed an issue where minor version upgrades and patch upgrades might take a few seconds longer because the runtime process was not exiting gracefully.
- Fixed an issue related to Optimized Reads-enabled tiered cache functionality that might result in longer recovery times after a failover to Aurora replica instances.
- Fixed a security issue when altering routine ownership.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-8713.
  - CVE-2025-8714.
  - CVE-2025-8715.
- Backported fixes for the following PLv8 extension's V8 Engine security vulnerabilities:
  - CVE-2022-1364.
  - CVE-2023-3079.
- Fixed a race condition where old writer instance may not step down after a new writer instance is promoted and continues to write.

General enhancements

- Fixed an issue that could prevent online recovery of an Aurora Replica from completing.
- Fixed an issue that could cause unavailability when apg_plan_mgmt is enabled.
- Fixed an issue with parallel heap scans that could lead to index inconsistency on tables larger than 16TiB when synchronize_seqscans is enabled.
- Fixed an issue in Query Plan Management with running a utility statement immediately after installing the extension or resetting shared memory.
- Fixed an issue in enforcing, validating and evolving plans in Query Plan Management.
- Fixed an issue that could cause prolonged Serverless v2 scaling time.
- Fixed a crash that occurred when using ST_AsGeoJSON after upgrading to a release containing PostGIS 3.5.1 without running postgis_extensions_upgrade.
- Fixed an issue causing a replica restart during the replica join case.

- Fixed an issue which can cause vacuum operations to become blocked after the restart of an Aurora replica in a Global Database.
- Fixed an issue causing query execution failure for execution plans using the "bitmap heap scan" access method.
- Fixed an issue impacting query execution performance for execution plans using the "bitmap heap scan" access method.

Aurora PostgreSQL 12.22.5, June 24, 2025

Critical stability enhancements

- Fixed an issue related to the interaction between Aurora Serverless scaling and the improved reader availability functionality that might result in longer recover times and impact availability.
- Fixed an issue in the `rds_activity_stream` extension that could cause brief periods of unavailability during configuration reloads and when maximum connections are consumed.

General enhancements

- Fixed an issue in handling of asynchronous I/O cancellation that could cause processes to become stuck indefinitely.
- Fixed an issue that causes minor version upgrades to fail with sleep/wake feature.
- Fixed an issue that can cause process stuck indefinitely at LWLock:BufferIO wait event.
- Added support of newly released Regions for the aws_s3 extension.
- Fixed an issue where unexpected internal communication channel re-establishments may cause increased latency on data processing.

Aurora PostgreSQL 12.22.4, March 24, 2025

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues.
  - CVE-2025-1094.

General enhancements

- Fixed an issue on the replica where a network interruption may not correctly re-establish connection with the writer.

Aurora PostgreSQL 12.22.3, February 13, 2025

High priority enhancements

- Fixed CVE-2020-6418 for V8 Engine in the PLV8 extension.

Aurora PostgreSQL 12.22.2, January 20, 2025

Critical Priority enhancements

- Fixed a security issue in the `rds_activity_stream` extension.

High priority enhancements

- Fixed an issue in Global DB switchover and failover that could result in customers needing to rebuild their mirror clusters.
- Fixed an issue where transactional commands may terminate the connection in some cases.

General enhancements.

- Fixed an ownership issue where the `postgis_raster` extension could not be updated correctly from a previous the PostGIS extension v2 installation.

Aurora PostgreSQL 12.22.1, December 27, 2024

Critical Priority enhancements

- Fixed an issue where the server was restarting when the connections were reset by the peer.

Aurora PostgreSQL 12.22, December 27, 2024

New features for 12.22

- Optimized the minor version and patch upgrade process to reduce downtime for read replicas.

Critical stability enhancements for 12.22

- Fixed an issue that in rare cases can cause CPU usage spike.

High priority enhancements for 12.22

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2024-10979
  - CVE-2024-10978
  - CVE-2024-10977
  - CVE-2024-10976

General enhancements for 12.22

- Made multiple improvements to Aurora in-Region failover which reduces database downtime further by improving storage metadata and faster buffer cache initialization.
- Made multiple improvements to upgrades with Zero-Downtime Patching (ZDP) which reduces connection restore time and enhances ZDP resilience from failures.
- Fixed an issue where the server_id value wasn't updated after an Amazon RDS Blue/Green Deployment switchover.
- Fixed an issue that could cause database restart during hash index extension.
- Fixed an issue that would cause migration from RDS PostgreSQL to fail in the presence of nested tablespaces.
- Fixed an issue that would cause excessive engine startup times in the presence of a large number of logical replication files.
- Fixed an issue that could cause a database restart when calling functions from `aws_s3`, `aws_lambda`, and `aws_ml` extensions in the same database session as `aws_s3.table_import_from_s3()`. This fix may decrease the per-call performance of functions from the `aws_s3`, `aws_lambda`, and `aws_ml` extensions.
- Fixed an issue that prevented updating the pgTAP extension to version 1.3.0 or later.
- Fixed an issue in the `PostGIS` extension, which in rare cases, could cause a DB instance restart.
- Fixed an issue in the `pg_repack` extension that compromises the integrity of invalid indexes.

Additional improvements and enhancements for 12.22

- Updated the following extensions:
  - pg_cron extension to v1.6.4.
  - PostGIS extension to version 3.4.3.
  - PROJ library extension to version 9.5.0.
  - GEOS library extension to verison 3.13.0.
  - orafce extension to 4.12.0.
  - pgvector extension to 0.7.4.
  - RDKit extension to 2024_03_6 release (4.6).
  - pg_hint_plan extension to version 1.3.10.

PostgreSQL 12.20 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 12.20. For more information about the improvements in PostgreSQL 12.20, see PostgreSQL release 12.20.

Releases and patches

- Aurora PostgreSQL 12.20.2, January 29, 2025
- Aurora PostgreSQL 12.20.1, January 02, 2025
- Aurora PostgreSQL 12.20, September 30, 2024

Aurora PostgreSQL 12.20.2, January 29, 2025

Critical stability enhancements.

- Fixed a security issue in the rds_activity_stream extension.

High priority enhancements.

- Fixed an issue in Global DB switchover and failover that could result in customers needing to rebuild their mirror clusters.
- Fixed an issue where transactional commands may terminate the connection in some cases.

General enhancements.

- Fixed an ownership issue where the postgis_raster extension could not be updated correctly from a previous the `PostGIS` extension v2 installation.

Aurora PostgreSQL 12.20.1, January 02, 2025

Critical stability enhancements

- Fixed an issue related to Query Plan Management background worker.
- Fixed a security issue in the `rds_activity_stream` extension.

High priority enhancements

- Fixed issue where Aurora in-Region failovers would result in failures in database startup.
- Fixed an issue for date functions to allow them to take into account the local/session timezone setting.
- Fixed an issue in Global DB switchover and failover that could result in customers needing to rebuild their mirror clusters.
- Fixed an issue where transactional commands may terminate the connection in some cases.
- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2024-10979.
  - CVE-2024-10978.
  - CVE-2024-10976.
  - CVE-2024-10977.

General enhancements

- Fixed an issue where minor version upgrades with ZDP would fail resulting in longer upgrade times.
- Made improvements to Aurora in-Region failover which reduces database downtime further with faster buffer cache initialization.
- Fixed an issue where reserved keyword “PRIMARY” caused syntax errors when used as a column name or alias in DML and DDL statements.

- Fixed an issue that could cause an error in the wal sender process when resuming logical replication.
- Fixed an ownership issue where the postgis_raster extension could not be updated correctly from a previous the `PostGIS` extension 2 installation.

Aurora PostgreSQL 12.20, September 30, 2024

New features

- Introduced a new fast failover feature to reduce database downtime during the `planned` extension failover events with fast storage metadata initialization and fast buffer cache recovery.
- Introduced an optimization to reduce Zero Downtime Patching (ZDP) quiet point duration to 1 second.

High priority enhancements

- Fixed issues where the replication of vacuum operations may cause a restart when handling conflicts with user queries.
- Fixed an issue where deleting a large range of keys from a BTree index could cause concurrent scans to crash.

General enhancements

- Enabled support for FIPS-validated cryptography, a fully owned AWS implementation. For more information, see AWS-LC is now FIPS 140-3 certified on AWS Security Blog.
- Improvements to database startup time during initialization and engine upgrades.
- Fixed an issue that prevented the inclusion of the `pg_bigm` extension in shared_preload_libraries.
- Fixed an issue during ZDP which causes some connections to be terminated due to long transferring time. A new ZDP metric in postgresql.log called `ZD_SOCKET_TRANSFER_CONN_DROPPED` represents these dropped connections.
- Improved reader availability for Aurora Replicas when using system administration functions.
- Fixed an in-memory two-phase commit (2PC) metadata caching issue that caused out-of-memory error on Aurora read replicas replicating from RDS PostgreSQL source instances.
- Fixed an issue in storage metadata initialization that can cause prolonged database startup time.

- Fixed an issue that will prevent reclaiming Aurora storage space during major version upgrade.

Additional improvements and enhancements

- Updated the following extensions:
  - `pgvector` extension to version 0.7.3.
  - `mysql_fdw` extension to version REL-2_9_2.
  - `orafce` extension to version 4.10.3.
  - `pgTAP` extension to version 1.3.3.
  - `pg_cron` extension to version 1.6.3.
  - `RDKit` extension to version 4.5 (Release 2024_03_5).
  - `wal2json` extension to version 2.6.
  - pg_ad_mapping extension to version 1.0.
  - HypoPG extension to version 1.4.1.

PostgreSQL 12.19 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 12.19. For more information about the improvements in PostgreSQL 12.19, see PostgreSQL release 12.19.

Releases and patches

- Aurora PostgreSQL 12.19.4, March 25, 2025
- Aurora PostgreSQL 12.19.3, January 23, 2025
- Aurora PostgreSQL 12.19.2, January 23, 2025
- Aurora PostgreSQL 12.19.1, September 27, 2024
- Aurora PostgreSQL 12.19, August 8, 2024

Aurora PostgreSQL 12.19.4, March 25, 2025

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
- CVE-2025-1094.

Aurora PostgreSQL 12.19.3, January 23, 2025

High priority enhancements

- Fixed CVE-2020-6418 for V8 Engine in the PLV8 extension.

Aurora PostgreSQL 12.19.2, January 23, 2025

Critical stability enhancements

- Fixed an issue related to Query Plan Management background worker.

High priority enhancements

- Fixed an issue for date functions to allow them to take into account the local/session timezone setting.
- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2024-10979.
  - CVE-2024-10978.
  - CVE-2024-10976.
  - CVE-2024-10977.

General enhancements

- Fixed an issue where minor version upgrades with ZDP would fail resulting in longer upgrade times.
- Made improvements to Aurora in-Region failover which reduces database downtime further with faster buffer cache initialization.
- Fixed an issue that could cause an error in the wal sender process when resuming logical replication.

Aurora PostgreSQL 12.19.1, September 27, 2024

General enhancements

- Fixed an issue that would cause ZDP to fail on Aurora Optimized Reads Cache instances while upgrading into this version.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-7348

Aurora PostgreSQL 12.19, August 8, 2024

New features

- Introduced a feature to capture database downtime metrics during upgrades and restarts.

General enhancements

- Improved Aurora PostgreSQL performance for generative AI workloads using `pgvector`.
- Fixed issue where minor version upgrades with ZDP would fail in some cases resulting in longer upgrade times.
- Fixed a bug where JDBC connections may not be preserved during ZDP enabled upgrades.
- Fixed an issue that caused two-phase commit files to remain, preventing proper cleanup.
- Improved memory handling while processing two phase commit files.
- Improved availability of Aurora read replicas.

High priority enhancements

- Fixed an issue which leads to cancellation of long-running queries on Global Database replica instances.

Critical stability enhancements

- Fixed a pg_repack issue that would incorrectly allow two vacuum processes to operate concurrently on the same table.

Additional improvements and enhancements

- Updated the following extensions:
  - `orafce` extension to version 4.9.4.
  - `pg_cron` extension to version 1.6.2.
  - `pg_partman` extension to version 5.1.0.
  - `pg_repack` extension to version 1.5.0.
  - `pg_tle` to version 1.4.0.
  - `pg_vector` extension to version 0.7.0.
  - `pgrouting` extension to version 3.6.2.
  - `pgTap` extension to version 1.3.2.
  - `PostGIS` extension to version 3.4.2.
  - `RDKit` extension to version 2024_03_1.

PostgreSQL 12.18 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 12.18. For more information about the improvements in PostgreSQL 12.18, see PostgreSQL release 12.18.

Releases and patches

- Aurora PostgreSQL 12.18.4, February 02, 2025
- Aurora PostgreSQL 12.18.3, October 7, 2024
- Aurora PostgreSQL 12.18.2, June 20, 2024
- Aurora PostgreSQL 12.18.1, April 29, 2024

Aurora PostgreSQL 12.18.4, February 02, 2025

Critical stability enhancements

- Fixed a security issue in the `rds_activity_stream` extension.

High priority enhancements

- Fixed an issue for date functions to allow them to take into account the local/session timezone setting.
- Fixed an issue in Global DB switchover and failover that can result in customers needing to rebuild their mirror clusters.
- Fixed an issue where transactional commands may terminate the connection in some cases.
- Fixed CVE-2020-6418 for V8 Engine in the PLV8 extension.
- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2024-10979.
  - CVE-2024-10978.
  - CVE-2024-10976.
  - CVE-2024-10977.
- **General enhancements**

  Fixed an ownership issue where the postgis_raster extension could not be updated correctly from a previous the `PostGIS` extension v2 installation.

Aurora PostgreSQL 12.18.3, October 7, 2024

General enhancements

- Fixed an issue that would cause ZDP to fail on Aurora Optimized Reads Cache instances while upgrading into this version.

High priority enhancements

- Fixed issues where the replication of vacuum operations may cause a restart when handling conflicts with user queries.
- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-7348

Aurora PostgreSQL 12.18.2, June 20, 2024

General enhancements

- Fixed multiple issues where minor version upgrades with ZDP would fail resulting in longer upgrade times.

High priority enhancements

- Fixed a crash with execution of pltsql user defined functions.
- Fixed an issue which led to cancellation of long-running queries on Global Database replica instances.

Critical stability enhancements

- Fixed an issue where a change in memory requirements during a minor version upgrade can cause zero-downtime patching and engine startup to fail.
- Fixed an issue with background worker where it may crash when executed in parallel worker context.
- Fixed a pg_repack issue causing two vacuums to concurrently process the same table.
- Fixed issues in how two-phase commit files are handled.

Aurora PostgreSQL 12.18.1, April 29, 2024

New features

- Added resource usage summary to `pg_dump`.

General enhancements

- Fixed multiple minor version upgrade issues to improve connection preservation with zero-downtime patching.
- Reduced database boot time due to improved initialization time for large volumes.
- Introduced faster COPY operations by reducing contention on the relation extension lock and proactively extending relations.

- Improvements to reduce replication lag by intelligently skipping the replay of certain log records, thereby reducing the replay load.
- Fixed an issue during recovery conflict on a read node which, in rare cases, could cause brief unavailability.
- Fixed an issue where a database would fail to startup during a major version upgrade patch, in rare scenarios.
- Improved availability of read replicas by allowing recovery from replication errors in more situations.
- Fixed an issue that would cause zero-downtime patching to timeout.
- Fixed a logical replication decoding issue that fails to process catalog modifying changes after spilling to storage if there was a concurrent aborted sub-transaction.
- Improved log record validation before it is written to storage.
- Fixed an issue that would result in sessions incorrectly reporting ClientRead wait events after a zero-downtime patching event.
- Fixed an ambiguous function definition of aws_s3.query_export_to_s3 when upgrading the aws_s3 extension from version 1.1 to 1.2.

High priority enhancements

- Fixed an issue related to resuming a logical replication slot where, in rare cases, it could cause the slot to become stuck.
- Fixed an issue that would result in a restart when creating a database in a tablespace.
- Fixed an issue related to incorrect logical replication error handling to improve DB stability.

Critical stability enhancements

- Fixed an issue related to replication origins that in rare cases might result in longer recovery time and impact availability.
- Fixed an issue that in rare cases may cause transactions to be partially replicated by newly created logical replication slots. For more information, see Potential data loss due to race condition during logical replication slot creation.
- Fixed an issue where a change in memory requirements during a minor version upgrade can cause zero-downtime patching and engine startup to fail.

Additional improvements and enhancements

- Updated the following extensions:
  - pg_tle extension to version 1.3.4.
  - PLV8 extension to version 3.1.10.
  - RDKit Cartridge to version Release_2023_09_4.
- New GUC Parameters has been added
  - pgtle.clientauth_databases_to_skip
  - pgtle.clientauth_db_name
  - pgtle.clientauth_num_parallel_workers
  - pgtle.clientauth_users_to_skip
  - pgtle.enable_clientauth
  - pgtle.passcheck_db_name

PostgreSQL 12.17 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 12.17. For more information about the improvements in PostgreSQL 12.17, see PostgreSQL release 12.17.

Releases and patches

- Aurora PostgreSQL 12.17.6, February 5 2025
- Aurora PostgreSQL 12.17.5, September 17, 2024
- Aurora PostgreSQL 12.17.4, June 24, 2024
- Aurora PostgreSQL 12.17.3, March 13, 2024
- Aurora PostgreSQL 12.17.2, February 22, 2024
- Aurora PostgreSQL 12.17.0, December 21, 2023

Aurora PostgreSQL 12.17.6, February 5 2025

Critical Priority enhancements

- Fixed a security issue in the rds_activity_stream extension.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2024-10979.
  - CVE-2024-10978.
  - CVE-2024-10977.
  - CVE-2024-10976.
- Fixed an issue for date functions to allow them to take into account the local/session timezone setting.
- Fixed an issue in Global DB switchover and failover that can result in customers needing to rebuild their mirror clusters.
- Fixed CVE-2020-6418 for V8 Engine in the PLV8 extension.

General enhancements

- Fixed an ownership issue where the postgis_raster extension could not be updated correctly from a previous the PostGIS extension v2 installation.

Aurora PostgreSQL 12.17.5, September 17, 2024

High priority enhancements

- Fixed an issue that would cause a longer restart time when `rds.enable_plan_management` is turned on, but apg_plan_mgmt extension is not installed.
- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-7348

Aurora PostgreSQL 12.17.4, June 24, 2024

General enhancements

- Fixed multiple issues where minor version upgrades with ZDP would fail resulting in longer upgrade times.

High priority enhancements

- Fixed an issue with Parallel query execution in which a backend may get into indefinite hang in certain cases.
- Fixed a crash with execution of pltsql user defined functions.
- Fixed an issue which led to cancellation of long-running queries on Global Database replica instances.

Critical stability enhancements

- Fixed an issue where a change in memory requirements during a minor version upgrade can cause zero-downtime patching and engine startup to fail.
- Fixed a pg_repack issue causing two vacuums to concurrently process the same table.

Aurora PostgreSQL 12.17.3, March 13, 2024

General enhancements

- Fixed a performance degradation issue in PLV8 extension.

Aurora PostgreSQL 12.17.2, February 22, 2024

General enhancements

- Allow `rds_superuser` to terminate backends which are not explicitly associated with a role.

High priority enhancements

- Fixed an issue where `pg_stat_statements` can block minor version upgrade during ZDP.
- Fixed an issue where a logical replication slot would no longer emit changes due to an overly strict data consistency check.
- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-0985

Critical stability enhancements

- Fixed an issue related to `apg_plan_mgmt`.
- Fixed a deadlock issue in Aurora Storage which can result in writer failover.
- Fixed an issue where active transactions during logical replication slot creation may be partially replicated by the slot.

Aurora PostgreSQL 12.17.0, December 21, 2023

Following the announcement of updates to the PostgreSQL database by the open source community, we have updated Amazon Aurora PostgreSQL-Compatible Edition to support PostgreSQL versions 15.5, 14.10, 13.13, and 12.17. These releases contain product improvements and bug fixes made by the PostgreSQL community, along with Aurora-specific improvements. New features and improvements for Babelfish for Aurora PostgreSQL version 3.4 are also included.

Refer to the Aurora version policy to help you to decide how often to upgrade and how to plan your upgrade process. As a reminder, if you are running any version of Amazon Aurora PostgreSQL version 11, you must upgrade to a newer major version by February 29, 2024.

New features

- Amazon Bedrock integration – By using the Amazon Aurora machine learning extension with your Aurora PostgreSQLDB cluster, you can now use Amazon Bedrock foundational AI models.
- Delegated Extension Support – This feature allows delegating extension management to lower privileged user with the new rds_extension role.
- Query Plan Management (QPM) enhancements – Plan outlines will be updated to the latest format version as part of the `update_plan_hash` action for `apg_plan_mgmt.validate_plans()`.
- Added support for the `HypoPG` extension at version 1.4.0.
- Added support for the `h3-pg` extension and the `h3-postgis` extension at version 4.1.3.

High priority enhancements

- Fixed an issue which may cause an Aurora replica to reboot when reading a page which was modified during `WAL` replay

- Fixed an issue where if a specific volume metadata is invalid on a source cluster, it will remain invalid on a cloned cluster. Since the clone cluster uses a new volume, the metadata will now be recreated.
- Fixed an issue which could, in rare cases, lead to an engine unavailable condition following a minor or patch version upgrade
- Fixed a bug that may cause an engine crash during zero-downtime patching (ZDP)
- Introduced a new parameter, `rds.enable_memory_management`, which is used to enable and disable the improved memory management feature.
- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2023-5870
  - CVE-2023-5869
  - CVE-2023-5868

General enhancements

- Fixed an issue which may cause an Aurora replica to reboot while reconnecting with the writer DB instance.
- Added support for the `rdkit.morgan_fp_size` parameter
- Fixed an issue which may cause unused `WAL` segements to not be properly removed
- Fixed an issue where `pglogical` does not correctly pass-through replication origin data when using the binary output format
- Fixed a crash in `dblink` and `postgres_fdw` extensions due to invalid connections
- Fixed an issue where the `aws_s3` extension can import `HTTP` error responses into the table

Additional improvements and enhancements

- Updated the following extensions:
  - `mysql_fdw` to version 2.9.1
  - `Oracle_fdw` to version 2.6.0
  - `Orafce` to version 4.6.0
  - `pg_cron` to version 1.6.0
  - `pg_hint_plan` to version 1.3.9
  - `pg_proctab` to version 0.0.10

- `plv8` to version 3.1.8
- `PostGIS` to version 3.4.0
- `prefix` to version 1.2.10
- `RDKit` to version 4.4.0 (Release_2023_09_1)

For information about extensions and modules, see Extensions supported for Aurora PostgreSQL 12.

PostgreSQL 12.16 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 12.16. For more information about the improvements in PostgreSQL 12.16, see PostgreSQL release 12.16.

Releases and patches

- Aurora PostgreSQL 12.16.9, February 27 2025
- Aurora PostgreSQL 12.16.8, November 14, 2024
- Aurora PostgreSQL 12.16.7, June 25, 2024
- Aurora PostgreSQL 12.16.6, March 13, 2024
- Aurora PostgreSQL 12.16.5, February 22, 2024
- Aurora PostgreSQL 12.16.2, December 13, 2023
- Aurora PostgreSQL 12.16.1, November 09, 2023
- Aurora PostgreSQL 12.16.0, October 24, 2023

Aurora PostgreSQL 12.16.9, February 27 2025

Critical Priority enhancements

- Fixed a security issue in the `rds_activity_stream` extension.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2024-10979.
  - CVE-2024-10978.

  - CVE-2024-10977.
  - CVE-2024-10976.
- Fixed an issue in Global DB switchover and failover that can result in customers needing to rebuild their mirror clusters.
- Fixed CVE-2020-6418 for V8 Engine in the PLV8 extension.

General enhancements

- Fixed an ownership issue where the postgis_raster extension could not be updated correctly from a previous the PostGIS extension v2 installation.

Aurora PostgreSQL 12.16.8, November 14, 2024

High priority enhancements

- Fixed an issue that would cause a longer restart time when `rds.enable_plan_management` is turned on, but apg_plan_mgmt extension is not installed.
- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-7348

Aurora PostgreSQL 12.16.7, June 25, 2024

General enhancements

- Fixed multiple issues where minor version upgrades with ZDP would fail resulting in longer upgrade times.

High priority enhancements

- Fixed an issue which led to cancellation of long-running queries on Global Database replica instances.

Critical stability enhancements

- Fixed an issue where a change in memory requirements during a minor version upgrade can cause zero-downtime patching and engine startup to fail.

- Fixed a pg_repack issue causing two vacuums to concurrently process the same table.

Aurora PostgreSQL 12.16.6, March 13, 2024

General enhancements

- Fixed a performance degradation issue in PLV8 extension.

Aurora PostgreSQL 12.16.5, February 22, 2024

General enhancements

- Allow `rds_superuser` to terminate backends which are not explicitly associated with a role.

High priority enhancements

- Fixed an issue where `pg_stat_statements` can block minor version upgrade during ZDP.
- Fixed an issue where a logical replication slot would no longer emit changes due to an overly strict data consistency check.
- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-0985

Critical stability enhancements

- Fixed an issue related to `apg_plan_mgmt`.
- Fixed a deadlock issue in Aurora Storage which can result in writer failover.
- Fixed an issue where active transactions during logical replication slot creation may be partially replicated by the slot.

Aurora PostgreSQL 12.16.2, December 13, 2023

Critical stability enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2023-5870
  - CVE-2023-5869

- CVE-2023-5868

General stability enhancements

- Fixed an issue with logical replication actions being performed by someone other than the table owner

Aurora PostgreSQL 12.16.1, November 09, 2023

Critical stability enhancements

- Backported a fix for the following security issue:
  - CVE-2023-38545
- Fixed an issue related to `pg_cron` background worker processes

General enhancements

- Fixed an issue related to buffer pin locking that in rare cases can result in a crash

Aurora PostgreSQL 12.16.0, October 24, 2023

New features

- Added support for `mysql_fdw` version 2.9.0
- Added support in the `aws_s3` extension for exporting to an S3 bucket encrypted with a customer managed KMS key
- Improved the availability of Aurora replicas in the global DB secondary clusters
- Added support for query plan capture on Aurora replicas
- Allowed query plans under a given cost threshold to not be captured

General enhancements

- Fixed an issue in the `aws_s3` extension where the number of rows exported is incorrectly reported when the total number exceeds 2 billion

- Provided options to configure timeouts in the `aws_s3` extension. By setting the following parameters (GUCs), customers will now be able to change the timeout thresholds for imports from S3:
  - `aws_s3.curlopt_low_speed_limit`
  - `aws_s3.curlopt_low_speed_time`
- Improved the performance of replay of commit transaction operations on Aurora replicas
- Fixed an issue where, in rare cases, an import from the `aws_s3` extension fails to complete
- Updated the GEOS library for PostGIS to version 3.12.0
- Added the `WAIT_EVENT_Aurora_CLUSTER_CACHE_MANAGER_SENDER` wait event to denote wait times in the cluster cache manager sender
- Added the `WAIT_EVENT_Aurora_SERVERLESS_MONITORING_MAIN` wait event to denote wait times in Aurora Serverless resource monitoring
- Fixed an issue where the database may crash during the start of a logical replication slot
- Increased the limit for `pg_cron` `cron.max_running_jobs` parameter from 100 to 1000

Additional improvements and enhancements

- Updated the following extensions:
  - `orafce` to version 4.3.0
  - `pg_logical` to version 2.4.3
  - `pgvector` to version 0.5.0
  - `plv8` to version 3.1.6
  - `PostGIS` to version 3.3.3
  - `RDKit` to version 4.3

For information about extensions and modules, see Extensions supported for Aurora PostgreSQL 12.

PostgreSQL 12.15 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 12.15. For more information about the improvements in PostgreSQL 12.15, see PostgreSQL release 12.15.

Releases and patches

- Aurora PostgreSQL 12.15.8, February 24 2025
- Aurora PostgreSQL 12.15.7, November 12, 2024
- Aurora PostgreSQL 12.15.6, August 7, 2024
- Aurora PostgreSQL 12.15.5, March 13, 2024
- Aurora PostgreSQL 12.15.4, December 14, 2023
- Aurora PostgreSQL 12.15.3, November 14, 2023
- Aurora PostgreSQL 12.15.2, October 4, 2023
- Aurora PostgreSQL 12.15.0, July 13, 2023

Aurora PostgreSQL 12.15.8, February 24 2025

Critical Priority enhancements

- Fixed a security issue in the `rds_activity_stream` extension.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2024-10979.
  - CVE-2024-10978.
  - CVE-2024-10977.
  - CVE-2024-10976.
- Fixed an issue for date functions to allow them to take into account the local/session timezone setting.
- Fixed an issue in Global DB switchover and failover that could result in customers needing to rebuild their mirror clusters.
- Fixed CVE-2020-6418 for V8 Engine in the PLV8 extension.

General enhancements

- Fixed an ownership issue where the postgis_raster extension could not be updated correctly from a previous the PostGIS extension v2 installation.

Aurora PostgreSQL 12.15.7, November 12, 2024

High priority enhancements

- Fixed an issue that would cause a longer restart time when `rds.enable_plan_management` is turned on, but apg_plan_mgmt extension is not installed.
- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-7348

Aurora PostgreSQL 12.15.6, August 7, 2024

Critical stability enhancements

- Fixed a pg_repack issue causing two vacuums to concurrently process the same table.
- Fixed a V8 Engine CVE-2018-6065 for PLV8 2.x.

General enhancements

- Fixed issue where minor version upgrades with ZDP would fail resulting in longer upgrade times.

Aurora PostgreSQL 12.15.5, March 13, 2024

General enhancements

- Allow `rds_superuser` to terminate backends which are not explicitly associated with a role.

High priority enhancements

- Fixed an issue that would cause a logical replication slot to transiently error out in the presence of aborted subtransactions and DDL.
- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-0985

Critical stability enhancements

- Fixed an issue related to `apg_plan_mgmt`.

- Fixed a deadlock issue in Aurora Storage which can result in writer failover.
- Fixed an issue where active transactions during logical replication slot creation may be partially replicated by the slot.

Aurora PostgreSQL 12.15.4, December 14, 2023

Critical stability enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2023-5870
  - CVE-2023-5869
  - CVE-2023-5868

General stability enhancements

- Fixed an issue with logical replication actions being performed by someone other than the table owner

Aurora PostgreSQL 12.15.3, November 14, 2023

Critical stability enhancements

- Backported a fix for the following security issue:
  - CVE-2023-38545
- Fixed an issue related to `pg_cron` background worker processes

General enhancements

- Fixed an issue that could result in read replica lag due to stale metadata
- Fixed an issue related to buffer pin locking that in rare cases can result in a crash

Aurora PostgreSQL 12.15.2, October 4, 2023

High priority stability enhancements

- Backported a fix for the following PostgreSQL community security issue:

- CVE-2023-39417

High priority enhancements

- Fixed an issue which can cause a database instance to restart while executing I/O intensive read workloads.
- Fixed an issue which can cause vacuum operations to become blocked after the restart of an Aurora replica.
- Fixed an issue that would cause a crash when executing the `COPY FROM` command.
- Fixed an issue that would cause high CPU usage and prevent new connections.
- Fixed an issue where `UPDATE` and `DELETE` from a table with foreign key could fail unexpectedly with "ERROR: 40001: could not serialize access due to concurrent update when using Serializable snapshot".

General enhancements

- Introduced diagnostics for the transient metadata used for I/O.
- Updated the `plv8`, `pll`, and `plcoffee` extensions to version 2.3.15.
- Fixed an issue that prevented the enablement of improved memory management in certain scenarios in Aurora PostgreSQL 15.3.

Aurora PostgreSQL 12.15.0, July 13, 2023

Following the announcement of updates to the PostgreSQL database by the open source community, we have updated Amazon Aurora PostgreSQL-Compatible Edition to support PostgreSQL versions 15.3, 14.8, 13.11, 12.15, and 11.20. These releases contains product improvements and bug fixes made by the PostgreSQL community, along with Aurora-specific improvements. The releases also contain new features and improvements for Babelfish for Aurora PostgreSQL version 3.2, and improved support for AWS Database Migration Service. Refer to the Amazon Aurora versions to help you to decide how often to upgrade and how to plan your upgrade process. As a reminder, if you are running any version of Amazon Aurora PostgreSQL 11, you must upgrade to a newer major version by February 29, 2024.

New features

- This release contains memory management improvements which increase database stability and availability by proactively preventing issues caused by insufficient memory. For more information, see Improved memory management in Aurora PostgreSQL.
- Added support for the `pgvector` extension version 0.4.1.

High priority enhancements

- Fixed an issue with the subtransaction metadata handling when performing a survivable reader reconnect.
- Fixed an issue during ZDP which is related to the extension environment variables.
- Addressed a transient error during logical replication that caused a process to incorrectly calculate that it had encountered an unexpected page.
- Fixed an issue which causes a period of unavailability due to a partially created replication origin state file.

General enhancements

- Added a new function, `aurora_stat_memctx_usage()`, to show backend memory use breakdown at a Postgres memory context level.
- Provided options to configure the timeouts within the `aws_lambda` extension. By setting the following parameters (GUCs), customers will now be able to change the connect and request timeouts for AWS Lambda integration:
  - `aws_lambda.connect_timeout_ms`.
  - `aws_lambda.request_timeout_ms`.
- Fixed an issue with the calculation of the `AuroraReplicaLag` metric.
- Fixed an issue where, in rare cases, the `aws_s3` extension could fail to import from an Amazon S3 bucket with a name containing dots.
- Further reduced the database downtime during ZDP.
- Fixed a bug which can cause unavailability during ZDP.
- Fixed an issue which caused `pg_ls_waldir()` to return "ERROR: could not stat file".
- Added support for TLS 1.3 with ciphers TLS_AES_128_GCM_SHA256 and TLS_AES_256_GCM_SHA384.

- Addressed an issue that blocked a major version upgrade on the Aurora replica of an RDS for PostgreSQL DB instance.
- Fixed an issue in the `pg_vector` extension where, in rare cases, infinite or NAN values caused a crash during the index creation
- Upgraded GEOS to version 3.11.2.
- Upgraded `pg_cron` to version 1.5.
- Upgraded `pg_partman` to version 4.7.3.
- Upgraded `tds_fdw` to 2.0.3.

PostgreSQL 12.14 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 12.14. For more information about the improvements in PostgreSQL 12.14, see PostgreSQL release 12.14.

Releases and patches

- Aurora PostgreSQL 12.14.9, November 6, 2024
- Aurora PostgreSQL 12.14.8, August 7, 2024
- Aurora PostgreSQL 12.14.7, March 13, 2024
- Aurora PostgreSQL 12.14.6, December 15, 2023
- Aurora PostgreSQL 12.14.5, November 14, 2023
- Aurora PostgreSQL 12.14.4, October 5, 2023
- Aurora PostgreSQL 12.14.3, July 24, 2023
- Aurora PostgreSQL 12.14.2, May 10, 2023
- Aurora PostgreSQL 12.14.1, April 5, 2023

Aurora PostgreSQL 12.14.9, November 6, 2024

High priority enhancements

- Fixed an issue that would cause a longer restart time when `rds.enable_plan_management` is turned on, but apg_plan_mgmt extension is not installed.
- Fixed issues where the replication of vacuum operations may cause a restart when handling conflicts with user queries.

- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-7348

Aurora PostgreSQL 12.14.8, August 7, 2024

Critical stability enhancements

- Fixed a pg_repack issue causing two vacuums to concurrently process the same table.
- Fixed a V8 Engine CVE-2018-6065 for PLV8 2.x.

General enhancements

- Fixed issue where minor version upgrades with ZDP would fail resulting in longer upgrade times.

Aurora PostgreSQL 12.14.7, March 13, 2024

General enhancements

- Allow `rds_superuser` to terminate backends which are not explicitly associated with a role.

High priority enhancements

- Fixed an issue that would cause a logical replication slot to transiently error out in the presence of aborted subtransactions and DDL.
- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-0985

Critical stability enhancements

- Fixed an issue related to `apg_plan_mgmt`.
- Fixed a deadlock issue in Aurora Storage which can result in writer failover.
- Fixed an issue where active transactions during logical replication slot creation may be partially replicated by the slot.

Aurora PostgreSQL 12.14.6, December 15, 2023

Critical stability enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2023-5870
  - CVE-2023-5869
  - CVE-2023-5868

General stability enhancements

- Fixed an issue with logical replication actions being performed by someone other than the table owner

Aurora PostgreSQL 12.14.5, November 14, 2023

Critical stability enhancements

- Backported a fix for the following security issue:
  - CVE-2023-38545
- Fixed an issue related to `pg_cron` background worker processes

General enhancements

- Fixed an issue that could result in read replica lag due to stale metadata
- Fixed an issue related to buffer pin locking that in rare cases can result in a crash

Aurora PostgreSQL 12.14.4, October 5, 2023

Critical stability enhancements

- Backported a fix for the following PostgreSQL community security issue:
  - CVE-2023-39417

High priority enhancements

- Fixed an issue which can cause a database instance to restart while executing I/O intensive read workloads.
- Fixed an issue which can cause vacuum operations to become blocked after the restart of an Aurora replica.
- Fixed an issue that would cause high CPU usage and prevent new connections.

General enhancements

- Introduced diagnostics for the transient metadata used for I/O.
- Updated the `plv8`, `pll`, and `plcoffee` extensions to version 2.3.15.

Aurora PostgreSQL 12.14.3, July 24, 2023

General enhancements

- Fixed an issue related to storage space reclamation following table drop or reindex or truncate operations.
- Fixed an issue with the calculation of the `AuroraReplicaLag` metric
- Fixed a bug which can cause unavailability during ZDP
- Fixed an issue that prevented reclaiming storage on transaction commits
- Fixed an issue preventing `pglogical` from logging conflicting rows during the apply phase
- Added Aurora Serverless v2 scaling enhancements
- Fixed an issue where, in rare cases, the `aws_s3` extension could fail to import from an Amazon S3 bucket with a name containing dots.
- Provided options to configure the timeouts within the `aws_lambda` extension. By setting the following parameters (GUCs), customers will now be able to change the connect and request timeouts for AWS Lambda integration:
  - `aws_lambda.connect_timeout_ms`.
  - `aws_lambda.request_timeout_ms`.
- Fixed multiple issues which can cause Aurora replicas with the improved read availability feature to restart when reconnecting with the writer instance.
- Fixed an issue preventing a survivable reader reconnect

Aurora PostgreSQL 12.14.2, May 10, 2023

General enhancements

- Fixed an error when loading the `test_decoding` plugin in `pg_create_logical_replication_slot`.
- Updated the Oracle client used by the `oracle_fdw` extension to version 21.9.0.0.0.

Aurora PostgreSQL 12.14.1, April 5, 2023

New features

- Introduced a new QPM plan hash calculation for multi-schema support. If users want to use QPM in multi-schema environments, they can set the `apg_plan_mgmt.plan_hash` version to 2 and call `apg_plan_mgmt.validate_plans`('`update_plan_hash`').

General enhancements

- Upgraded `PROJ` support to version 9.1.0
- Upgraded the `GDAL` library in `PostGIS` to version 3.5.3
- Added support for the `TCN` and `SEG` extensions
- Fixed an issue which may increase the amount of recovery work the database does to startup with logical replication enabled
- Improved performance of deletes from b-tree and hash indexes on Aurora replicas
- Fixed issues that caused incorrect I/O timing metrics in `EXPLAIN`
- Fixed an issue that caused incorrect buffer hit counts in `EXPLAIN`
- Improved the engine startup time, particularly on large instances with many objects
- The Aurora function `aurora_stat_logical_wal_cache()` is now visible to all users
- Fixed an issue in QPM that could cause unavailability when enforcing plans from prepared statements

Additional improvements and enhancements

- Updated the following extensions:
  - `hll` to version 2.17

- `Oracle_fdw` to version 2.5.0
- `orafce` to version 4.0.0
- `pg_cron` to version 1.4.2
- `pg_hint_plan` to version 1.3.8
- `pg_logical` to version 2.4.2
- `pg_trgm` to version 1.4
- `pgrouting` to version 3.4.1
- `PostGIS` to version 3.3.2
- `SEG` to version 1.0
- `TCN` to version 1.0
- `wal2json` to version 2.5

PostgreSQL 12.13 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 12.13. For more information about the improvements in PostgreSQL 12.13, see PostgreSQL release 12.13.

Releases and patches

- Aurora PostgreSQL 12.13.10, November 18, 2024
- Aurora PostgreSQL 12.13.9, August 7, 2024
- Aurora PostgreSQL 12.13.8, March 13, 2024
- Aurora PostgreSQL 12.13.7, December 15, 2023
- Aurora PostgreSQL 12.13.6, November 17, 2023
- Aurora PostgreSQL 12.13.5, October 04, 2023
- Aurora PostgreSQL 12.13.4, September 13, 2023
- Aurora PostgreSQL 12.13.2, March 3, 2023
- Aurora PostgreSQL 12.13.0, January 20, 2023

Aurora PostgreSQL 12.13.10, November 18, 2024

High priority enhancements

- Fixed an issue that would cause a longer restart time when `rds.enable_plan_management` is turned on, but apg_plan_mgmt extension is not installed.
- Fixed issues where the replication of vacuum operations may cause a restart when handling conflicts with user queries.
- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-7348

Aurora PostgreSQL 12.13.9, August 7, 2024

Critical stability enhancements

- Fixed a pg_repack issue causing two vacuums to concurrently process the same table.
- Fixed a V8 Engine CVE-2018-6065 for PLV8 2.x.

General enhancements

- Fixed issue where minor version upgrades with ZDP would fail resulting in longer upgrade times.

Aurora PostgreSQL 12.13.8, March 13, 2024

General enhancements

- Allow `rds_superuser` to terminate backends which are not explicitly associated with a role.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-0985

Critical stability enhancements

- Fixed an issue related to `apg_plan_mgmt`.

- Fixed a deadlock issue in Aurora Storage which can result in writer failover.
- Fixed an issue where active transactions during logical replication slot creation may be partially replicated by the slot.

Aurora PostgreSQL 12.13.7, December 15, 2023

Critical stability enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2023-5870
  - CVE-2023-5869
  - CVE-2023-5868

General stability enhancements

- Fixed an issue with logical replication actions being performed by someone other than the table owner

Aurora PostgreSQL 12.13.6, November 17, 2023

Critical stability enhancements

- Backported a fix for the following security issue:
  - CVE-2023-38545
- Fixed an issue related to `pg_cron` background worker processes

Aurora PostgreSQL 12.13.5, October 04, 2023

High priority stability enhancements

- Fixed an issue which blocked vacuum operations after the restart of an Aurora replica.
- Fixed an issue which can cause a database instance to restart while executing IO intensive read workloads.
- Fixed an issue that would cause high CPU usage and prevent new connections.

General enhancements

- Introduced diagnostics for the transient metadata used for I/O.

Aurora PostgreSQL 12.13.4, September 13, 2023

General enhancements

- Added Aurora Serverless v2 scaling enhancements
- Fixed an issue in `pg_cron` which can prevent scaling in Aurora Serverless v2
- Fixed an issue with the calculation of the `AuroraReplicaLag` metric
- Fixed a bug which can cause unavailability during ZDP
- Fixed an issue preventing `pglogical` from logging conflicting rows during the apply phase
- Fixed an issue where, in rare cases, the `aws_s3` extension could fail to import from an Amazon S3 bucket with a name containing dots.
- Provided options to configure the timeouts within the `aws_lambda` extension. By setting the following parameters, customers will now be able to change the connect and request timeouts for AWS Lambda integration:
  - `aws_lambda.connect_timeout_ms`.
  - `aws_lambda.request_timeout_ms`.
- Updated the `plv8`, `plls`, and `plcoffee` extensions to version 2.3.15.

Aurora PostgreSQL 12.13.2, March 3, 2023

General stability enhancements

- Fixed an issue in `PostGIS` where the `GDAL` data wasn't loading.
- Fixed an issue that increased the amount of recovery work during startup if logical replication is enabled.
- Fixed an issue for the better error handling of procedures with large numbers of parameters.
- Fixed an issue with the `aws_s3` extension where loading a large number of records can time out.

Aurora PostgreSQL 12.13.0, January 20, 2023

High priority stability enhancements

- Fixed an issue where an upgrade fails because the oldest `MultiXactId` is updated incorrectly.
- Fixed an issue where the commit latency metrics weren't updated.
- Fixed an issue that could lead to a brief period of unavailability.

General stability enhancements

- Fixed an issue that caused DB instance migration failures.
- Fixed an issue where the DB fails to start because of an inconsistency in the metadata.
- Improved the error handling and diagnosability.
- Upgraded the RDKit extension to version 4.2.
- Upgraded the `GDAL` library to version 3.4.3.
- The apg_plan_mgmt.copy_outline function now copies environment_variables.
- Fixed an issue that can cause certain processes to linger in an inconsistent state during a clean shutdown.
- Fixed an issue with the pg_repack extension.
- Improved the collation library (glibc) handling with a new independent default collation library.

PostgreSQL 12.12 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 12.12. For more information about the improvements in PostgreSQL 12.12, see PostgreSQL release 12.12.

Releases and patches

- Aurora PostgreSQL 12.12.8, November 22, 2024
- Aurora PostgreSQL 12.12.7, August 7, 2024
- Aurora PostgreSQL 12.12.6, March 13, 2024
- Aurora PostgreSQL 12.12.5, December 18, 2023
- Aurora PostgreSQL 12.12.4, November 17, 2023
- Aurora PostgreSQL 12.12.3, October 17, 2023
- Aurora PostgreSQL 12.12.2, March 2, 2023

- Aurora PostgreSQL 12.12.1, December 13, 2022
- Aurora PostgreSQL 12.12.0, November 09, 2022

Aurora PostgreSQL 12.12.8, November 22, 2024

High priority enhancements

- Fixed an issue that would cause a longer restart time when `rds.enable_plan_management` is turned on, but apg_plan_mgmt extension is not installed.
- Fixed issues where the replication of vacuum operations may cause a restart when handling conflicts with user queries.

Aurora PostgreSQL 12.12.7, August 7, 2024

Critical stability enhancements

- Fixed a pg_repack issue causing two vacuums to concurrently process the same table.
- Fixed a V8 Engine CVE-2018-6065 for PLV8 2.x.

General enhancements

- Fixed issue where minor version upgrades with ZDP would fail resulting in longer upgrade times.

Aurora PostgreSQL 12.12.6, March 13, 2024

General enhancements

- Allow `rds_superuser` to terminate backends which are not explicitly associated with a role.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-0985

Critical stability enhancements

- Fixed an issue related to `apg_plan_mgmt`.

- Fixed a deadlock issue in Aurora Storage which can result in writer failover.
- Fixed an issue where active transactions during logical replication slot creation may be partially replicated by the slot.

Aurora PostgreSQL 12.12.5, December 18, 2023

Critical stability enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2023-5870
  - CVE-2023-5869
  - CVE-2023-5868

General stability enhancements

- Fixed an issue with logical replication actions being performed by someone other than the table owner

Aurora PostgreSQL 12.12.4, November 17, 2023

Critical stability enhancements

- Backported a fix for the following security issue:
  - CVE-2023-38545
- Fixed an issue related to `pg_cron` background worker processes

Aurora PostgreSQL 12.12.3, October 17, 2023

High priority stability enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2023-39417
  - CVE-2023-2455
  - CVE-2023-2454
  - CVE-2022-41862

High priority enhancements

- Fixed an issue which blocked vacuum operations after the restart of an Aurora replica.
- Fixed an issue that would cause high CPU usage and prevent new connections.

General stability enhancements

- Fixed an issue which causes the stats collector process to repeatedly restart.
- Improved the scale times for Aurora Serverless v2.
- Fix a bug which can cause unavailability during ZDP.
- Fixed an issue preventing `pglogical` from logging conflicting rows during the apply phase.
- Fixed an issue where, in rare cases, the `aws_s3` extension could fail to import from an S3 bucket with a name containing dots.
- Provided options to configure the timeouts within the `aws_lambda` extension. By setting the following parameters, customers will now be able to change the connect and request timeouts for AWS Lambda integration:
  - `aws_lambda.connect_timeout_ms`.
  - `aws_lambda.request_timeout_ms`.
- Fixed an issue which can cause a database instance to restart while executing I/O intensive read workloads.
- Updated the `plv8`, `pll`, and `plcoffee` extensions to version 2.3.15.

Aurora PostgreSQL 12.12.2, March 2, 2023

General stability enhancements

- Fixed an issue that increased the amount of recovery work during startup if logical replication is enabled.
- Fixed an issue for better error handling of procedures with large numbers of parameters.
- Fixed an issue with the `aws_s3` extension where loading a large number of records can time out.
- Fixed an issue with the `pg_cron` parallel running of tasks.

Aurora PostgreSQL 12.12.1, December 13, 2022

General stability enhancements

- Fixed an issue that can cause increased network traffic when a writer instance transmits logs to a replica instance.
- Fixed an issue where the engine experiences stability issues during database minor and patch release upgrades.
- Fixed an issue that could cause data inconsistency during replication.

Aurora PostgreSQL 12.12.0, November 09, 2022

General stability enhancements

- Added support for the `rds_superuser` role to execute `CREATE OPERATOR CLASS`, `REATE OPERATOR FAMILY`, and `ALTER OPERATOR FAMILY`, which are available in the higher versions.
- Improved buffer cache scavenging when the buffer cache is in duress.
- Fixed an issue in database activity streams that leads to high memory consumption.
- Fixed an issue that caused DB instance restarts.
- Fixed an issue where a DB instance restarts recursively while generating monitoring metrics during a crash.
- Fixed an issue where a DB instance restarted during performance metric collection.
- Fixed an issue where an attempt to connect to the database would fail with `SSLV3_ALERT_CERTIFICATE_UNKNOWN`.
- Improved the diagnostic logging around setting invalid hint bits.
- Fixed an issue where autovacuum would incorrectly skip tables.
- Improved the logical replication prefetching.
- Fixed a durability issue in the GIN indexes.
- Fixed an issue to detect and cancel stuck major version upgrades.
- Fixed an issue in hash join that could lead to increased memory consumption.
- Improved the logical replication performance.
- Fixed an issue that causes database activity stream inconsistency when the monitoring agent is unavailable.

- Upgraded the GEOS version to 3.10.3.
- Updated the PostGIS extension to version 3.2.3.
- Fixed an issue with st_orientedenvelope that caused it to loop with a 1-D input to return 0.
- Fixed an issue where the connection to SQL Server using tds_fdw fails.

PostgreSQL 12.11 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 12.11. For more information about the improvements in PostgreSQL 12.11, see PostgreSQL release 12.11.

Releases and patches

- Aurora PostgreSQL 12.11.11, November 20, 2024
- Aurora PostgreSQL 12.11.10, August 7, 2024
- Aurora PostgreSQL 12.11.9, March 13, 2024
- Aurora PostgreSQL 12.11.8, December 22, 2023
- Aurora PostgreSQL 12.11.7, November 17, 2023
- Aurora PostgreSQL 12.11.6, October 19, 2023
- Aurora PostgreSQL 12.11.5, December 14, 2022
- Aurora PostgreSQL 12.11.4, November 17, 2022
- Aurora PostgreSQL 12.11.3, October 13, 2022
- Aurora PostgreSQL 12.11.1, July 6, 2022
- Aurora PostgreSQL 12.11.0, June 9, 2022

Aurora PostgreSQL 12.11.11, November 20, 2024

High priority enhancements

- Fixed an issue that would cause a longer restart time when rds.enable_plan_management is turned on, but apg_plan_mgmt extension is not installed.
- Fixed issues where the replication of vacuum operations may cause a restart when handling conflicts with user queries.
- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-7348

Aurora PostgreSQL 12.11.10, August 7, 2024

Critical stability enhancements

- Fixed a pg_repack issue causing two vacuums to concurrently process the same table.
- Fixed a V8 Engine CVE-2018-6065 for PLV8 2.x.

General enhancements

- Fixed issue where minor version upgrades with ZDP would fail resulting in longer upgrade times.

Aurora PostgreSQL 12.11.9, March 13, 2024

General enhancements

- Allow `rds_superuser` to terminate backends which are not explicitly associated with a role.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-0985

Critical stability enhancements

- Fixed an issue related to `apg_plan_mgmt`.
- Fixed a deadlock issue in Aurora Storage which can result in writer failover.
- Fixed an issue where active transactions during logical replication slot creation may be partially replicated by the slot.

Aurora PostgreSQL 12.11.8, December 22, 2023

Critical stability enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2023-5870
  - CVE-2023-5869

- CVE-2023-5868

General stability enhancements

- Fixed an issue with logical replication actions being performed by someone other than the table owner

Aurora PostgreSQL 12.11.7, November 17, 2023

Critical stability enhancements

- Backported a fix for the following security issue:
  - CVE-2023-38545
- Fixed an issue related to `pg_cron` background worker processes

Aurora PostgreSQL 12.11.6, October 19, 2023

High priority stability enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2023-39417
  - CVE-2023-2455
  - CVE-2023-2454
  - CVE-2022-41862
  - CVE-2022-2625

High priority enhancements

- Fixed an issue which blocked vacuum operations after the restart of an Aurora replica.
- Fixed an issue that would cause high CPU usage and prevent new connections.

General stability enhancements

- Fixed an issue which causes the stats collector process to repeatedly restart.
- Improved the scale times for Aurora Serverless v2.

- Fix a bug which can cause unavailability during ZDP.
- Fixed an issue preventing `pglogical` from logging conflicting rows during the apply phase.
- Fixed an issue where, in rare cases, the `aws_s3` extension could fail to import from an S3 bucket with a name containing dots.
- Provided options to configure the timeouts within the `aws_lambda` extension. By setting the following parameters, customers will now be able to change the connect and request timeouts for AWS Lambda integration:
  - `aws_lambda.connect_timeout_ms`.
  - `aws_lambda.request_timeout_ms`.
- Updated the `plv8`, `pll`, and `plcoffee` extensions to version 2.3.15.

Aurora PostgreSQL 12.11.5, December 14, 2022

General stability enhancements

- Fixed an issue where the engine experiences stability issues during database minor and patch release upgrades.
- Fixed an issue that causes database activity stream inconsistency when the monitoring agent is unavailable.
- Fixed an issue that could cause data inconsistency during replication.

Aurora PostgreSQL 12.11.4, November 17, 2022

High priority stability enhancements

- Fixed an issue that can cause increased network traffic when a writer instance transmits logs to a replica instance.

Aurora PostgreSQL 12.11.3, October 13, 2022

High priority stability enhancements

- Fixed a PLV8 issue where the base parameter doesn't get loaded properly into the memory.

General stability enhancements

- Fixed a bug where Aurora PostgreSQL can't file the relfilenode.
- Fixed a stuck scaling issue when the current scaling event times out.
- Upgraded the `PostGIS` extension to version 3.1.7.
- Fixed an issue where extended query messages might be lost during zero-downtime patching (ZDP) causing the extended query to hang after the ZDP completion.

Aurora PostgreSQL 12.11.1, July 6, 2022

Critical stability enhancements

- Fixed an issue that could cause periods of unavailability during a storage node restart.

High priority stability enhancements

- Fixed an error handling issue related to out-of-memory conditions which could result in brief periods of unavailability.
- Fixed an issue when the connection to SQL Server fails using the `TDS_FDW` extension to query a foreign table.
- Fixed an issue that caused connections using the provided root certificate to fail.
- Improved the diagnostic and supportability information in case of inconsistent B-tree index entries.

Aurora PostgreSQL 12.11.0, June 9, 2022

New features

- Added support for the `large object` module (extension). For more information, see Managing large objects with the lo module.
- Added support for zero-downtime patching (ZDP) for minor version upgrades and patches. For more information, see Minor release upgrades and zero-downtime patching in the *Amazon Aurora User Guide*.

Critical updates

- Fixed a replay crash due to an LSN mismatch.
- Fixed the `aws_s3` extension to prevent invalid region injection.

High stability updates

- Fixed multiple issues related to out-of-memory conditions which could result in brief periods of unavailability.

General stability updates

- Fixed a lock contention crash during an Aurora Serverless v1 scaling event.
- Fixed an issue where logical replication becomes stuck after a restart.
- Fixed multiple issues that could lead to brief periods of unavailability.
- Fixed a crash in `pg_cron` due to a task still running but being unscheduled.
- Fixed, during redo, an invalid page hit on the Generic Redo for GENERIC_XLOG_FULL_PAGE_DATA. This happens due to a timing hole between generating the log record and then writing the metadata for the record on the RW node and the RO node replays between those operations.
- Improved the query performance by supporting parallel workers.
- Upgraded the plugin `wal2json` version to 2.4.
- Upgraded the `pglogical` extension to version 2.4.1.

PostgreSQL 12.10 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 12.10. For more information about the improvements in PostgreSQL 12.10, see PostgreSQL release 12.10.

Releases and patches

- Aurora PostgreSQL 12.10.6, December 16, 2022
- Aurora PostgreSQL 12.10.4, July 18, 2022
- Aurora PostgreSQL 12.10.1, April 27, 2022
- Aurora PostgreSQL 12.10.0, March 29, 2022

Aurora PostgreSQL 12.10.6, December 16, 2022

General enhancements

- Fixed an issue that can cause increased network traffic when a writer instance transmits logs to a replica instance.
- Fixed an issue that causes database activity stream inconsistency when the monitoring agent is unavailable.
- Updated the `PostGIS` extension to version 3.1.7.

Aurora PostgreSQL 12.10.4, July 18, 2022

Security enhancements

- Backpatched the PostgreSQL community fix for CVE-2022-1552: Autovacuum, REINDEX, and others omit "security restricted operation". For more information, see CVE-2022-1552.

Critical enhancements

- Fixed an issue during a storage node restart that could result in periods of unavailability.

High stability enhancements

- Fixed an error handling issue related to out-of-memory conditions that could result in brief periods of unavailability.
- Fixed an issue related to the existence of duplicate relation files that could result in periods of unavailability.
- Fixed a defect where the validation of cached plans may lead to a database restart when the plan was previously invalidated.

Aurora PostgreSQL 12.10.1, April 27, 2022

High priority stability enhancements

- Fixed an issue that could cause incorrect `WriteIOPS` reporting in the AWS console.
- Fixed an issue that could cause unavailability after removal of a read node from a cluster.

General enhancements

- Fixed an issue that could cause an engine restart during periods of low free memory.

Aurora PostgreSQL 12.10.0, March 29, 2022

High priority stability enhancements

- Fixed multiple issues that may result in unavailability of a read node.
- Fixed an issue that may result in a read node being unable to replay WAL requiring the replication slot to be dropped and resynchronized.
- Fixed an issue that could cause excess storage use due to files not being properly closed.

General enhancements

- Fixed a small memory leak on read nodes when `commit_ts` is set.
- Fixed an issue that caused Performance Insights to show "Unknown wait event".
- Fixed an issue that could cause an import from Amazon S3 to fail when using the `aws_s3` extension.
- Fixed multiple issues that could result in periods of unavailability when using `apg_plan_mgmt`.
- Fixed multiple issues that could result in periods of unavailability when QPM is enabled.

PostgreSQL 12.9

This release of Aurora PostgreSQL is compatible with PostgreSQL 12.9. For more information about the improvements in PostgreSQL 12.9, see PostgreSQL release 12.9.

Releases and patches

- Aurora PostgreSQL 12.9.18, January 15th, 2026
- Aurora PostgreSQL 12.9.16, June 18, 2025
- Aurora PostgreSQL 12.9.15 April 29, 2025
- Aurora PostgreSQL 12.9.13, November 22, 2024
- Aurora PostgreSQL 12.9.12, August 7, 2024
- Aurora PostgreSQL 12.9.11, March 13, 2024
- Aurora PostgreSQL 12.9.10, December 27, 2023

- Aurora PostgreSQL 12.9.9, November 17, 2023
- Aurora PostgreSQL 12.9.8, October 19, 2023
- Aurora PostgreSQL 12.9.7, August 24, 2023
- Aurora PostgreSQL 12.9.6, December 16, 2022
- Aurora PostgreSQL 12.9.4, July 20, 2022
- Aurora PostgreSQL 12.9.3, April 13, 2022
- Aurora PostgreSQL 12.9.1
- Aurora PostgreSQL 12.9.0

Aurora PostgreSQL 12.9.18, January 15th, 2026

Critical stability enhancements

- Fixed a security issue when altering routine ownership.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-8713.

    CVE-2025-8714.

    CVE-2025-8715.

    CVE-2025-12817.

    CVE-2025-12818.
- Backported fixes for the following PLv8 extension's V8 Engine security vulnerabilities:
  - CVE-2023-3079.
- Fixed a race condition where old writer instance may not step down after a new writer instance is promoted and continues to write.

General stability enhancements

- Fixed an issue with parallel heap scans that could lead to index inconsistency on tables larger than 16TiB when synchronize_seqscans is enabled.

Aurora PostgreSQL 12.9.16, June 18, 2025

Critical stability enhancements

- Fixed an issue related to the interaction between Aurora Serverless scaling and the improved reader availability functionality that might result in longer recover times and impact availability.
- Fixed an issue in the `rds_activity_stream` extension that could cause brief periods of unavailability during configuration reloads and when maximum connections are consumed.

Aurora PostgreSQL 12.9.15 April 29, 2025

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-1094.

Aurora PostgreSQL 12.9.13, November 22, 2024

High priority enhancements

- Fixed an issue that would cause a longer restart time when `rds.enable_plan_management` is turned on, but apg_plan_mgmt extension is not installed.
- Fixed issues where the replication of vacuum operations may cause a restart when handling conflicts with user queries.

Aurora PostgreSQL 12.9.12, August 7, 2024

Critical stability enhancements

- Fixed a pg_repack issue causing two vacuums to concurrently process the same table.
- Fixed a V8 Engine CVE-2018-6065 for PLV8 2.x.

Aurora PostgreSQL 12.9.11, March 13, 2024

General stability enhancements

- Allow `rds_superuser` to terminate backends which are not explicitly associated with a role.

- Upgraded PLV8 extension to version 2.3.15.

High priority stability enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2024-0985

Critical stability enhancements

- Fixed an issue related to `apg_plan_mgmt`.
- Fixed an issue where active transactions during slot creation may be partially replicated by the slot.
- Fixed a deadlock issue in Aurora storage which can result in writer failover.

Aurora PostgreSQL 12.9.10, December 27, 2023

Critical stability enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2023-5870
  - CVE-2023-5869
  - CVE-2023-5868

General stability enhancements

- Fixed an issue with logical replication actions being performed by someone other than the table owner

Aurora PostgreSQL 12.9.9, November 17, 2023

Critical stability enhancements

- Backported a fix for the following security issue:
  - CVE-2023-38545
- Fixed an issue related to `pg_cron` background worker processes

Aurora PostgreSQL 12.9.8, October 19, 2023

High priority stability enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2023-39417
  - CVE-2023-2455
  - CVE-2023-2454
  - CVE-2022-41862

Aurora PostgreSQL 12.9.7, August 24, 2023

General enhancements

- Fixed an issue which causes the stats collector process to repeatedly restart.
- Fixed an issue preventing `pglogical` from logging conflicting rows during the apply phase.

Aurora PostgreSQL 12.9.6, December 16, 2022

General enhancements

- Fixed an issue that can cause increased network traffic when a writer instance transmits logs to a replica instance.
- Fixed an issue that causes database activity stream inconsistency when the monitoring agent is unavailable.
- Updated the `PostGIS` extension to version 3.1.7.

Aurora PostgreSQL 12.9.4, July 20, 2022

Security enhancements

- Backpatched the PostgreSQL community fix for CVE-2022-1552: Autovacuum, REINDEX, and others omit "security restricted operation". For more information, see CVE-2022-1552.

Critical enhancements

- Fixed an issue during a storage node restart that could result in periods of unavailability.

High stability enhancements

- Fixed an error handling issue related to out-of-memory conditions that could result in brief periods of unavailability.
- Fixed an issue related to the existence of duplicate relation files that could result in periods of unavailability.
- Fixed an issue that could cause excess storage use due to files not being properly closed.
- Fixed an issue that caused Performance Insights to show "Unknown wait event".

Aurora PostgreSQL 12.9.3, April 13, 2022

Security enhancements

- Additional modifications to the `pg_cron` extension to mitigate a security issue during create extension. The issue was addressed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.

General enhancements

- Fixed a bug that could cause an engine restart during periods of low free memory.

Aurora PostgreSQL 12.9.1

Security enhancements

- Updated the `PostGIS` extension from version 3.1.4 to 3.1.5. This update contains a `PostGIS` fix for the vulnerability addressed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.
- Modified the `ip4r` extension to mitigate a security issue during create extension. The issue was originally disclosed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.
- Modified the `pg_bigm` extension to mitigate a security issue during create extension. The issue was addressed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.

- Modified the `pg_cron` extension to mitigate a security issue during create extension. The issue was addressed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.

Aurora PostgreSQL 12.9.0

Critical stability enhancements

- Fixed a bug where logical replication may hang resulting in the replay falling behind on the read node. The instance may eventually restart.

Additional improvements and enhancements

- Fixed a buffer cache bug that could cause brief periods of unavailability.
- Fixed a bug in the `apg_plan_mgmt` extension where an index based plan was not being enforced.
- Fixed a bug in the `pg_logical` extension that could cause brief periods of unavailability due to improper handling of NULL arguments.
- Fixed an issue where orphaned files caused major version upgrades to fail.
- Fixed incorrect Aurora Storage Daemon log write metrics.
- Fixed multiple bugs that could result in WAL replay falling behind and eventually causing the reader instances to restart.
- Improved the Aurora buffer cache page validation on reads.
- Improved the Aurora storage metadata validation.
- Updated the `pg_cron` extension to v1.4.
- Updated the `pg_hint_pan` extension to v1.3.7.

- For information about extensions and modules, see Extensions supported for Aurora PostgreSQL 12.

PostgreSQL 12.8 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 12.8. For more information about the improvements in PostgreSQL 12.8, see PostgreSQL release 12.8.

Releases and patches

- Aurora PostgreSQL 12.8.6, December 19, 2022
- Aurora PostgreSQL 12.8.4, July 6, 2022
- Aurora PostgreSQL 12.8.2, April 12, 2022
- Aurora PostgreSQL 12.8.1
- Aurora PostgreSQL 12.8.0

Aurora PostgreSQL 12.8.6, December 19, 2022

General enhancements

- Fixed an issue that causes database activity stream inconsistency when the monitoring agent is unavailable.

Aurora PostgreSQL 12.8.4, July 6, 2022

Security enhancements

- Backpatched the PostgreSQL community fix for CVE-2022-1552: Autovacuum, REINDEX, and others omit "security restricted operation". For more information, see CVE-2022-1552.

General enhancements

- Fixed an error handling issue related to out-of-memory conditions which could result in brief periods of unavailability.
- Fixed an issue that could cause excess storage use due to files not being properly closed.
- Fixed an issue that could cause Performance Insights to display "Unknown wait event".
- Fixed an issue that could result in periods of unavailability due to the existence of duplicate relation files.

Aurora PostgreSQL 12.8.2, April 12, 2022

Security enhancements

- Additional modifications to the `pg_cron` extension to mitigate a security issue during create extension. The issue was addressed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.

General enhancements

- Fixed a buffer cache bug that could cause brief periods of unavailability.

Aurora PostgreSQL 12.8.1

Security enhancements

- Updated the `PostGIS` extension from version 3.1.4 to 3.1.5. This update contains a `PostGIS` fix for the vulnerability addressed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.
- Modified the `ip4r` extension to mitigate a security issue during create extension. The issue was originally disclosed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.
- Modified the `pg_bigm` extension to mitigate a security issue during create extension. The issue was addressed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.
- Modified the `pg_cron` extension to mitigate a security issue during create extension. The issue was addressed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.

Aurora PostgreSQL 12.8.0

Critical stability enhancements

- Fixed an issue where, in rare circumstances, a data cache of a read node may be inconsistent following a restart of that node.

High priority stability enhancements

- Fixed an issue where queries may become unresponsive due to I/O resource exhaustion triggered by prefetch.
- Fixed an issue where Aurora may flag an issue following a major version update with the message: "PANIC: could not access status of next transaction id xxxxxxxx".

Additional improvements and enhancements

- Fixed an issue which can cause vacuum operations to become blocked after all Aurora read replicas have been removed from a secondary cluster.
- Fixed an issue where read nodes restart due to a replication origin cache lookup failure.
- Fixed an issue where read queries may time out on read nodes during the replay of lazy truncation triggered by vacuum on the write node.
- Fixed an issue that causes Performance Insights to incorrectly set the backend type of a database connection.
- Fixed an issue where the aurora_postgres_replica_status() function returned stale or lagging CPU stats.
- Fixed an issue where the role `rds_superuser` did not have permission to execute the `pg_stat_statements_reset()` function.
- Fixed an issue with the `apg_plan_mgmt` extension where the planning and execution times were reported as 0.
- Removed support for the DES, 3DES, and RC4 cipher suites.
- Updated `PostGIS` extension to version 3.1.4.

PostgreSQL 12.7, Aurora PostgreSQL 4.2 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 12.7. For more information about the improvements in PostgreSQL 12.7, see PostgreSQL release 12.7.

Releases and patches

- Aurora PostgreSQL 12.7.5, December 30, 2022
- Aurora PostgreSQL 12.7.4, July 14, 2022
- Aurora PostgreSQL 4.2.3, April 7, 2022

- Aurora PostgreSQL 4.2.2
- Aurora PostgreSQL 4.2.1
- Aurora PostgreSQL 4.2.0

Aurora PostgreSQL 12.7.5, December 30, 2022

General enhancements

- Fixed an issue that causes database activity stream inconsistency when the monitoring agent is unavailable.

Aurora PostgreSQL 12.7.4, July 14, 2022

Security enhancements

- Backpatched the PostgreSQL community fix for CVE-2022-1552: Autovacuum, REINDEX, and others omit "security restricted operation". For more information, see CVE-2022-1552.

High priority stability enhancements

- Fixed an error handling issue related to out-of-memory conditions which could result in brief periods of unavailability.
- Fixed an issue that could cause excess storage use due to files not being properly closed.
- Fixed an issue that caused Performance Insights to show "Unknown wait event".

Aurora PostgreSQL 4.2.3, April 7, 2022

Security enhancements

- Additional modifications to the `pg_cron` extension to mitigate a security issue during create extension. The issue was addressed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.

Aurora PostgreSQL 4.2.2

Security enhancements

- Modified the `pg_cron` extension to mitigate a security issue during create extension. The issue was addressed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.
- Modified the `pg_bigm` extension to mitigate a security issue during create extension. The issue was addressed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.
- Modified the `ip4r` extension to mitigate a security issue during create extension. The issue was originally disclosed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.
- Backpatched the PostgreSQL community fix for CVE-2021-3677: “Memory disclosure in certain queries”. For more information, see CVE-2021-3677
- Backpatched postgis to PostGIS 3.0.3. This is a `PostGIS` fix for the vulnerability addressed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.

Aurora PostgreSQL 4.2.1

Critical stability enhancements

- Fixed an issue where, in rare circumstances, a data cache of a read node may be inconsistent following a restart of that node.

High priority stability enhancements

- Fixed an issue where queries may become unresponsive due to I/O resource exhaustion triggered by prefetch.
- Fixed an issue where Aurora may flag an issue following a major version update with the message: "PANIC: could not access status of next transaction id xxxxxxxx".

Additional improvements and enhancements

- Fixed an issue where read nodes restart due to a replication origin cache lookup failure.

- Fixed an issue with the `apg_plan_mgmt` extension where planning and execution time were reported as 0.
- Fixed an issue that causes Performance Insights to incorrectly set the backend type of a database connection.
- Fixed an issue with the `apg_plan_mgmt` extension where plan outline on a partitioned table did not enforce an index-based plan.
- Fixed an issue where orphaned files caused failed translations in read codepaths during or after major version upgrade.
- Fixed multiple issues in the Aurora storage daemon that could lead to brief periods of unavailability when specific network configurations are used.
- Fixed an out-of-memory crash issue with Aurora storage daemon that leads to writer node restart. This also reduces the overall system memory consumption.

Aurora PostgreSQL 4.2.0

New features

- Added support for the `oracle_fdw` extension version 2.3.0.

High priority stability enhancements

- Fixed an issue where creating a database from an existing template database with tablespace resulted in an error with the message `ERROR: could not open file pg_tblspc/...: No such file or directory`.
- Fixed an issue where, in rare cases, an Aurora replica may be unable to start when a large number of PostgreSQL subtransactions (i.e. SQL savepoints) have been used.
- Fixed an issue where, in rare circumstances, read results may be inconsistent for repeated read requests on replica nodes.

Additional improvements and enhancements

- Upgraded OpenSSL to 1.1.1k.
- Reduced CPU usage and memory consumption of the WAL apply process on Aurora replicas for some workloads.
- Improved safety checks in the write path to detect incorrect writes to metadata.

- Improved security by removing 3DES and other older ciphers for SSL/TLS connections.
- Fixed an issue where a duplicate file entry can prevent the Aurora PostgreSQL engine from starting up.
- Fixed an issue that could cause temporary unavailability under heavy workloads.
- Added back ability to use a leading forward slash in the Amazon S3 path during S3 import.
- Added Graviton support for oracle_fdw extension version 2.3.0.
- Changed the following extensions:
  - Updated the `orafce` extension to version 3.16.
  - Updated the `pg_partman` extension to version 4.5.1.
  - Updated the `pg_cron` extension to version 1.3.1.
  - Updated the `postgis` extension to version 3.0.3.

PostgreSQL 12.6, Aurora PostgreSQL 4.1 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 12.6. For more information about the improvements in PostgreSQL 12.6, see PostgreSQL release 12.6.

Releases and patches

- Aurora PostgreSQL 4.1.2, April 7, 2022
- Aurora PostgreSQL 4.1.1
- Aurora PostgreSQL 4.1.0

Aurora PostgreSQL 4.1.2, April 7, 2022

Security enhancements

- Additional modifications to the `pg_cron` extension to mitigate a security issue during create extension. The issue was addressed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.

Aurora PostgreSQL 4.1.1

Security enhancements

- Modified the pg_cron extension to mitigate a security issue during create extension. The issue was addressed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.
- Modified the pg_bigm extension to mitigate a security issue during create extension. The issue was addressed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.
- Modified the ip4r extension to mitigate a security issue during create extension. The issue was originally disclosed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.
- Backpatched the PostgreSQL community fix for CVE-2021-3677: “Memory disclosure in certain queries”. For more information, see CVE-2021-3677
- Backpatched pg_partman to 4.4.0. This is a pg_partman fix for the vulnerability addressed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.
- Backpatched postgis to PostGIS 3.0.2. This is a PostGIS fix for the vulnerability addressed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.
- Backpatched an input validation error in the log_fdw extension function parameters.

Aurora PostgreSQL 4.1.0

New features

- Added support for the following extensions:
  - The pg_proctab extension version 0.0.9
  - The pg_partman extension version 4.4.0. For more information, see Managing PostgreSQL partitions with the pg_partman extension in the *Amazon Aurora User Guide*.
  - The pg_cron extension version 1.3.0. For more information, see Scheduling maintenance with the PostgreSQL pg_cron extension in the *Amazon Aurora User Guide*.
  - The pg_bigm extension version 1.2

High priority stability enhancements

- Fixed a bug in the `pglogical` extension that could lead to data inconsistency for inbound replication.
- Fixed a bug where in rare cases a reader had inconsistent results when it restarted while a transaction with more than 64 subtransactions was being processed.
- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2021-32027
  - CVE-2021-32028
  - CVE-2021-32029

Additional improvements and enhancements

- Fixed a bug where the database could not be started when there were many relations in memory-constrained environments.
- Fixed a bug in the `apg_plan_mgmt` extension that could cause brief periods of unavailability due to an internal buffer overflow.
- Fixed a bug on reader nodes that could cause brief periods of unavailability during WAL replay.
- Fixed a bug in the `rds_activity_stream` extension that caused an error during startup when attempting to log audit events.
- Fixed bugs in the `aurora_replica_status` function where rows were sometimes partially populated and some values such as Replay Latency, and CPU usage were always 0.
- Fixed a bug where the database engine would attempt to create shared memory segments larger than the instance total memory and fail repeatedly. For example, attempts to create 128 GiB shared buffers on a db.r5.large instance would fail. With this change, requests for total shared memory allocations larger than the instance memory allow setting the instance to incompatible parameters.
- Added logic to clean up unnecessary `pg_wal` temporary files on a database startup.
- Fixed a bug that could lead to outbound replication synchronization errors after a major version upgrade.
- Fixed a bug that reported ERROR: rds_activity_stream stack item 2 not found on top - cannot pop when attempting to create the `rds_activity_stream` extension.
- Fixed a bug that could cause the error failed to build any 3-way joins in a correlated `IN` subquery under an `EXISTS` subquery.

- Backported the following performance improvement from the PostgreSQL community: pg_stat_statements: add missing check for pgss_enabled().
- Fixed a bug that could cause upgrades to Aurora PostgreSQL 12.x to fail due to the inability to open the `pg_control` file.
- Fixed a bug that could cause brief periods of unavailability due to running out of memory when creating the `postgis` extension with `pgAudit` enabled.
- Backported the following bug fix from the PostgreSQL community: Fix use-after-free bug with AfterTriggersTableData.storeslot.
- Fixed a bug when using outbound logical replication to synchronize changes to another database that could fail with an error message like ERROR: could not map filenode "base/16395/228486645" to relation OID.
- Fixed a bug that could cause a brief period of unavailability when canceling a transaction.
- Fixed a bug that caused no ICU collations to be shown in the `pg_collation` catalog table after creating a new Aurora PostgreSQL 12.x instance. This issue does not affect upgrading from an older version.
- Fixed a bug where the `rds_ad` role wasn't created after upgrading from a version of Aurora PostgreSQL that doesn't support Microsoft Active Directory authentication.
- Added btree page checks to detect tuple metadata inconsistency.
- Fixed a bug in asynchronous buffer reads that could cause brief periods of unavailability on reader nodes during WAL replay.
- Fixed a bug where reading a TOAST value from disk could cause a brief period of unavailability.
- Fixed a bug that caused brief periods of unavailability when attempting to fetch a tuple from and index scan.

PostgreSQL 12.4, Aurora PostgreSQL 4.0 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 12.4. For more information about the improvements in PostgreSQL 12.4, see PostgreSQL release 12.4.

Releases and patches

- Aurora PostgreSQL 4.0.5
- Aurora PostgreSQL 4.0.2
- Aurora PostgreSQL 4.0.1
- Aurora PostgreSQL 4.0.0

Aurora PostgreSQL 4.0.5

- Modified the `ip4r` extension to mitigate a security issue during create extension. The issue was originally disclosed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.
- Backpatched the PostgreSQL community fix for CVE-2021-3677: “Memory disclosure in certain queries”. For more information, see CVE-2021-3677
- Backpatched postgis to `PostGIS` 3.0.2. This is a `PostGIS` fix for the vulnerability addressed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.
- Backpatched an input validation error in the `log_fdw` extension function parameters.

Aurora PostgreSQL 4.0.2

High priority stability enhancements

- Fixed a bug where a reader node might render an extra or missing row if the reader restarted while the writer node is processing a long transaction with more than 64 subtransactions.
- Fixed a bug that can cause vacuum to block on GiST indexes.
- Fixed a bug where after upgrade to PostgreSQL 12, vacuum can fail on the system table `pg_catalog.pg_shdescription` with the following error. ERROR: found xmin 484 from before relfrozenxid

Additional improvements and enhancements

- Fixed a bug that could lead to intermittent unavailability due to a race condition when handling responses from storage nodes.
- Fixed a bug that could lead to intermittent unavailability due to the rotation of network encryption keys.
- Fixed a bug that could lead to intermittent unavailability due to heat management of the underlying storage segments.
- Fixed a bug where a large Amazon S3 import with thousands of clients can cause one or more of the import clients to stop responding.
- Removed a restriction that prevented setting configuration variable strings that contained `brazil`.

- Fixed a bug that could lead to intermittent unavailability if a reader node runs a query that access many tables while the writer node is acquiring exclusive locks on all of the same tables.

Aurora PostgreSQL 4.0.1

New features

- This release adds support for the Graviton2 db.r6g instance classes to the PostgreSQL engine version 12.4. For more information, see Supported DB engines for DB instance classes in the *Amazon Aurora User Guide*.

Critical stability enhancements

- Fixed a bug that caused a read replica to unsuccessfully restart repeatedly in rare cases.
- Fixed a bug where a cluster became unavailable when attempting to create more than 16 read replicas or Aurora global database secondary AWS Regions. The cluster became available again when the new read replica or secondary AWS Region was removed.

Additional improvements and enhancements

- Fixed a bug that when under heavy load, snapshot import, COPY import, or Amazon S3 import stopped responding in rare cases.
- Fixed a bug where a read replica might not join the cluster when the writer was very busy with a write-intensive workload.
- Fixed a bug where a cluster could be unavailable briefly when a high-volume Amazon S3 import was running.
- Fixed a bug that caused a cluster to take several minutes to restart if a logical replication stream was terminated while handling many complex transactions.
- Fixed the Just-in-Time (JIT) compilation, which was incorrectly enabled by default in Aurora PostgreSQL 4.0.0.
- Disallowed the use of both AWS Identity and Access Management (IAM) and Kerberos authentication for the same user.

Aurora PostgreSQL 4.0.0

New features

- This version supports a major version upgrade from PostgreSQL 11.7, Aurora PostgreSQL 3.2 (Deprecated) and later versions.

Additional improvements and enhancements

- Contains several improvements that were announced for PostgreSQL releases 12.0, 12.1, 12.2, 12.3, and 12.4.
- Contains all fixes, features, and improvements present in PostgreSQL 11.9, Aurora PostgreSQL 3.4.
- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2020-25694
  - CVE-2020-25695
  - CVE-2020-25696
- Updated the following extensions:
  - `address_standardizer` to version 3.0.2
  - `address_standardizer_data_us` to version 3.0.2
  - `amcheck` to version 1.2
  - `citext` to version 1.6
  - `hll` to version 2.14
  - `hstore` to version 1.6
  - `ip4r` to version 2.4
  - `pg_repack` to version 1.4.5
  - `pg_stat_statements` to version 1.7
  - `pgaudit` to version 1.4
  - `pglogical` to version 2.3.2
  - `pgrouting` to version 3.0.3
  - `plv8` to version 2.3.14
  - `postGIS` to version 3.0.2
  - `postgis_tiger_geocoder` to version 3.0.2

- `postgis_topology` to version 3.0.2

PostgreSQL 11 versions (includes some deprecated versions)

Version updates

- PostgreSQL 11.21
- PostgreSQL 11.20 (Deprecated)
- PostgreSQL 11.19 (Deprecated)
- PostgreSQL 11.18 (Deprecated)
- PostgreSQL 11.17 (Deprecated)
- PostgreSQL 11.16 (Deprecated)
- PostgreSQL 11.15 (Deprecated)
- PostgreSQL 11.14 (Deprecated)
- PostgreSQL 11.13 (Deprecated)
- PostgreSQL 11.12, Aurora PostgreSQL 3.6 (Deprecated)
- PostgreSQL 11.11, Aurora PostgreSQL 3.5 (Deprecated)
- PostgreSQL 11.9, Aurora PostgreSQL 3.4
- PostgreSQL 11.8, Aurora PostgreSQL 3.3 (Deprecated)
- PostgreSQL 11.7, Aurora PostgreSQL 3.2 (Deprecated)
- PostgreSQL 11.6, Aurora PostgreSQL 3.1 (Deprecated)
- PostgreSQL 11.4, Aurora PostgreSQL 3.0 (Deprecated)

PostgreSQL 11.21

This release of Aurora PostgreSQL is compatible with PostgreSQL 11.21. For more information about the improvements in PostgreSQL 11.21, see PostgreSQL release 11.21.

Releases and patches

- Aurora PostgreSQL 11.21.12, January 14, 2026
- Aurora PostgreSQL 11.21.11, August 5, 2025
- Aurora PostgreSQL 11.21.10, May 7, 2025
- Aurora PostgreSQL 11.21.9, February 27 2025

- Aurora PostgreSQL 11.21.8, November 14, 2024
- Aurora PostgreSQL 11.21.7, June 25, 2024
- Aurora PostgreSQL 11.21.6, March 13, 2024
- Aurora PostgreSQL 11.21.5, February 22, 2024
- Aurora PostgreSQL 11.21.2, December 13, 2023
- Aurora PostgreSQL 11.21.1, November 09, 2023
- Aurora PostgreSQL 11.21.0, October 24, 2023

Aurora PostgreSQL 11.21.12, January 14, 2026

Critical stability enhancements

- Fixed an issue where engine minor and patch upgrade takes few seconds longer downtime due to runtime process not exiting gracefully.
- Fixed an issue related to Optimized Reads-enabled tiered cache functionality that might result in longer recovery times after a failover to Aurora replica instances.
- Fixed a security issue when altering routine ownership.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-8713.

    CVE-2025-8714.

    CVE-2025-8715.

    CVE-2025-12817.

    CVE-2025-12818.
- Backported fixes for the following PLv8 extension's V8 Engine security vulnerabilities:
  - CVE-2022-1364.
  - CVE-2023-3079.
- Fixed a race condition where old writer instance may not step down after a new writer instance is promoted and continues to write.

General enhancements

- Fixed an issue that could cause unavailability when `apg_plan_mgmt` is enabled.
- Fixed an issue with parallel heap scans that could lead to index inconsistency on tables larger than 16TiB when synchronize_seqscans is enabled.
- Fixed an issue with prolonged Serverless v2 scaling.

Aurora PostgreSQL 11.21.11, August 5, 2025

Critical stability enhancements

- Fixed an issue related to the interaction between Aurora Serverless scaling and the improved reader availability functionality that might result in longer recover times and impact availability.
- Fixed an issue in the rds_activity_stream extension that could cause brief periods of unavailability during configuration reloads and when maximum connections are consumed.

General enhancements

- Fixed an issue in the read replica deletion which could result in a vacuum being held back and causing eventual unavailability of database.
- Added support of newly released Regions for the aws_s3 extension.
- Fixed an issue where unexpected internal communication channel re-establishments may cause increased latency on data processing.

Aurora PostgreSQL 11.21.10, May 7, 2025

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-1094.

General enhancements

- Fixed an issue on the replica where a network interruption may not correctly re-establish connection with the writer.

Aurora PostgreSQL 11.21.9, February 27 2025

Critical Priority enhancements

- Fixed a security issue in the `rds_activity_stream` extension.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2024-10979.
  - CVE-2024-10978.
  - CVE-2024-10977.
  - CVE-2024-10976.
- Fixed an issue in Global DB switchover and failover that can result in customers needing to rebuild their mirror clusters.
- Fixed CVE-2020-6418 for V8 Engine in the PLV8 extension.

General enhancements

- Fixed an ownership issue where the postgis_raster extension could not be updated correctly from a previous the PostGIS extension v2 installation.

Aurora PostgreSQL 11.21.8, November 14, 2024

High priority enhancements

- Fixed an issue that would cause a longer restart time when `rds.enable_plan_management` is turned on, but apg_plan_mgmt extension is not installed.
- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-7348

Aurora PostgreSQL 11.21.7, June 25, 2024

General enhancements

- Fixed multiple issues where minor version upgrades with ZDP would fail resulting in longer upgrade times.
- Fixed an issue which prevented upgrading older PostGIS 2.4 installations to version 3.3.3.

Critical stability enhancements

- Fixed an issue where a change in memory requirements during a minor version upgrade can cause zero-downtime patching and engine startup to fail.
- Fixed a pg_repack issue causing two vacuums to concurrently process the same table.

Aurora PostgreSQL 11.21.6, March 13, 2024

General enhancements

- Fixed a performance degradation issue in PLV8 extension.

Aurora PostgreSQL 11.21.5, February 22, 2024

General enhancements

- Allow `rds_superuser` to terminate backends which are not explicitly associated with a role.

High priority enhancements

- Fixed an issue where `pg_stat_statements` can block minor version upgrade during ZDP.
- Fixed an issue where a logical replication slot would no longer emit changes due to an overly strict data consistency check.
- Backported fixes for the following PostgreSQL community security issue:
  - CVE-2024-0985

Critical stability enhancements

- Fixed an issue related to `apg_plan_mgmt`.

- Fixed a deadlock issue in Aurora Storage which can result in writer failover.
- Fixed an issue where active transactions during logical replication slot creation may be partially replicated by the slot.

Aurora PostgreSQL 11.21.2, December 13, 2023

Critical stability enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2023-5870
  - CVE-2023-5869
  - CVE-2023-5868

General stability enhancements

- Fixed an issue with logical replication actions being performed by someone other than the table owner

Aurora PostgreSQL 11.21.1, November 09, 2023

Critical stability enhancements

- Backported a fix for the following security issue:
  - CVE-2023-38545

Aurora PostgreSQL 11.21.0, October 24, 2023

New features

- Added support in the `aws_s3` extension for exporting to an S3 bucket encrypted with a customer managed KMS key

General enhancements

- Fixed an issue in the `aws_s3` extension where the number of rows exported is incorrectly reported when the total number exceeds 2 billion

- Provided options to configure timeouts in the `aws_s3` extension. By setting the following parameters (GUCs), customers will now be able to change the timeout thresholds for imports from S3:
  - `aws_s3.curlopt_low_speed_limit`
  - `aws_s3.curlopt_low_speed_time`
- Improved the performance of replay of commit transaction operations on Aurora replicas
- Fixed an issue where, in rare cases, an import from the `aws_s3` extension fails to complete
- Updated the GEOS library for PostGIS to version 3.12.0
- Added the `WAIT_EVENT_Aurora_CLUSTER_CACHE_MANAGER_SENDER` wait event to denote wait times in the cluster cache manager sender
- Added the `WAIT_EVENT_Aurora_SERVERLESS_MONITORING_MAIN` wait event to denote wait times in Aurora Serverless resource monitoring
- Fixed an issue where the database may crash during the start of a logical replication slot

Additional improvements and enhancements

- Updated the following extensions:
  - `orafce` to version 4.3.0
  - `pg_logical` to version 2.4.3
  - `plv8` to version 3.1.6
  - `PostGIS` to version 3.3.3
  - `RDKit` to version 4.3

For information about extensions and modules, see Extensions supported for Aurora PostgreSQL 11.

PostgreSQL 11.20 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 11.20. For more information about the improvements in PostgreSQL 11.20, see PostgreSQL release 11.20.

Releases and patches

- Aurora PostgreSQL 11.20.2, October 4, 2023
- Aurora PostgreSQL 11.20.0, July 13, 2023

Aurora PostgreSQL 11.20.2, October 4, 2023

Critical stability enhancements

- Backported a fix for the following PostgreSQL community security issue:
  - CVE-2023-39417

High priority enhancements

- Fixed an issue which can cause a database instance to restart while executing I/O intensive read workloads.
- Fixed an issue which can cause vacuum operations to become blocked after the restart of an Aurora replica.
- Fixed an issue that would cause a crash when executing the `COPY FROM` command.
- Fixed an issue that would cause high CPU usage and prevent new connections.
- Fixed an issue where `UPDATE` and `DELETE` from a table with foreign key could fail unexpectedly with "ERROR: 40001: could not serialize access due to concurrent update when using Serializable snapshot".

General enhancements

- Introduced diagnostics for the transient metadata used for I/O.
- Updated the `plv8`, `pll`, and `plcoffee` extensions to version 2.3.15.
- Fixed an issue that prevented the enablement of improved memory management in certain scenarios in Aurora PostgreSQL 15.3.

Aurora PostgreSQL 11.20.0, July 13, 2023

Following the announcement of updates to the PostgreSQL database by the open source community, we have updated Amazon Aurora PostgreSQL-Compatible Edition to support PostgreSQL versions 15.3, 14.8, 13.11, 12.15, and 11.20. These releases contains product improvements and bug fixes made by the PostgreSQL community, along with Aurora-specific improvements. The releases also contain new features and improvements for Babelfish for Aurora PostgreSQL version 3.2, and improved support for AWS Database Migration Service. Refer to the Amazon Aurora versions to help you to decide how often to upgrade and how to plan your upgrade

process. As a reminder, if you are running any version of Amazon Aurora PostgreSQL 11, you must upgrade to a newer major version by February 29, 2024.

New features

- This release contains memory management improvements which increase database stability and availability by proactively preventing issues caused by insufficient memory. For more information, see Improved memory management in Aurora PostgreSQL.

High priority enhancements

- Fixed an issue during ZDP which is related to the extension environment variables.
- Addressed a transient error during logical replication that caused a process to incorrectly calculate that it had encountered an unexpected page.
- Fixed an issue which causes a period of unavailability due to a partially created replication origin state file.

General enhancements

- Added a new function, `aurora_stat_memctx_usage()`, to show backend memory use breakdown at a Postgres memory context level.
- Provided options to configure the timeouts within the `aws_lambda` extension. By setting the following parameters (GUCs), customers will now be able to change the connect and request timeouts for AWS Lambda integration:
  - `aws_lambda.connect_timeout_ms`.
  - `aws_lambda.request_timeout_ms`.
- Fixed an issue with the calculation of the `AuroraReplicaLag` metric.
- Fixed an issue where, in rare cases, the `aws_s3` extension could fail to import from an Amazon S3 bucket with a name containing dots.
- Further reduced the database downtime during ZDP.
- Fixed a bug which can cause unavailability during ZDP.
- Fixed an issue which caused `pg_ls_waldir()` to return "ERROR: could not stat file".
- Added support for TLS 1.3 with ciphers TLS_AES_128_GCM_SHA256 and TLS_AES_256_GCM_SHA384.

- Addressed an issue that blocked a major version upgrade on the Aurora replica of an RDS for PostgreSQL DB instance.
- Upgraded GEOS to version 3.11.2.
- Upgraded `tds_fdw` to 2.0.3.

PostgreSQL 11.19 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 11.19. For more information about the improvements in PostgreSQL 11.19, see PostgreSQL release 11.19.

Releases and patches

- Aurora PostgreSQL 11.19.4, October 5, 2023
- Aurora PostgreSQL 11.19.3, July 24, 2023
- Aurora PostgreSQL 11.19.2, May 10, 2023
- Aurora PostgreSQL 11.19.1, April 5, 2023

Aurora PostgreSQL 11.19.4, October 5, 2023

Critical stability enhancements

- Backported a fix for the following PostgreSQL community security issue:
  - CVE-2023-39417

High priority enhancements

- Fixed an issue which can cause a database instance to restart while executing I/O intensive read workloads.
- Fixed an issue which can cause vacuum operations to become blocked after the restart of an Aurora replica.
- Fixed an issue that would cause high CPU usage and prevent new connections.

General enhancements

- Introduced diagnostics for the transient metadata used for I/O.
- Updated the `plv8`, `pll`, and `plcoffee` extensions to version 2.3.15.

Aurora PostgreSQL 11.19.3, July 24, 2023

General enhancements

- Fixed an issue related to storage space reclamation following table drop or reindex or truncate operations.
- Fixed an issue with the calculation of the `AuroraReplicaLag` metric
- Fixed a bug which can cause unavailability during ZDP
- Fixed an issue that prevented reclaiming storage on transaction commits
- Fixed an issue preventing `pglogical` from logging conflicting rows during the apply phase
- Added Aurora Serverless v2 scaling enhancements
- Fixed an issue where, in rare cases, the `aws_s3` extension could fail to import from an Amazon S3 bucket with a name containing dots.
- Provided options to configure the timeouts within the `aws_lambda` extension. By setting the following parameters (GUCs), customers will now be able to change the connect and request timeouts for AWS Lambda integration:
  - `aws_lambda.connect_timeout_ms`.
  - `aws_lambda.request_timeout_ms`.
- Fixed multiple issues which can cause Aurora replicas with the improved read availability feature to restart when reconnecting with the writer instance.
- Fixed an issue preventing a survivable reader reconnect.

Aurora PostgreSQL 11.19.2, May 10, 2023

General enhancements

- Fixed an error when loading the `test_decoding` plugin in `pg_create_logical_replication_slot`.

Aurora PostgreSQL 11.19.1, April 5, 2023

General enhancements

- Upgraded `PROJ` support to version 9.1.0
- Upgraded the `GDAL` library in `PostGIS` to version 3.5.3

- Added support for the TCN and SEG extensions
- Fixed an issue which may increase the amount of recovery work the database does to startup with logical replication enabled
- Fixed issues that caused incorrect I/O timing metrics in EXPLAIN
- Fixed an issue that caused incorrect buffer hit counts in EXPLAIN
- Improved the engine startup time, particularly on large instances with many objects
- The Aurora function aurora_stat_logical_wal_cache() is now visible to all users

Additional improvements and enhancements

- Updated the following extensions:
  - hll to version 2.17
  - orafce to version 4.0.0
  - pg_hint_plan to version 1.3.8
  - pg_logical to version 2.4.2
  - pg_trgm to version 1.4
  - pgrouting to version 3.4.1
  - PostGIS to version 3.3.2
  - SEG to version 1.0
  - TCN to version 1.0
  - wal2json to version 2.5

PostgreSQL 11.18 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 11.18. For more information about the improvements in PostgreSQL 11.18, see PostgreSQL release 11.18.

Releases and patches

- Aurora PostgreSQL 11.18.5, October 04, 2023
- Aurora PostgreSQL 11.18.4, September 13, 2023
- Aurora PostgreSQL 11.18.2, March 3, 2023
- Aurora PostgreSQL 11.18.0, January 20, 2023

Aurora PostgreSQL 11.18.5, October 04, 2023

High priority stability enhancements

- Fixed an issue which can cause a database instance to restart while executing IO intensive read workloads.
- Fixed an issue that would cause high CPU usage and prevent new connections.

General enhancements

- Introduced diagnostics for the transient metadata used for I/O.

Aurora PostgreSQL 11.18.4, September 13, 2023

General enhancements

- Added Aurora Serverless v2 scaling enhancements
- Fixed an issue with the calculation of the `AuroraReplicaLag` metric
- Fixed a bug which can cause unavailability during ZDP
- Fixed an issue preventing `pglogical` from logging conflicting rows during the apply phase
- Fixed an issue where, in rare cases, the `aws_s3` extension could fail to import from an Amazon S3 bucket with a name containing dots.
- Provided options to configure the timeouts within the `aws_lambda` extension. By setting the following parameters, customers will now be able to change the connect and request timeouts for AWS Lambda integration:
  - `aws_lambda.connect_timeout_ms`.
  - `aws_lambda.request_timeout_ms`.
- Updated the `plv8`, `plls`, and `plcoffee` extensions to version 2.3.15.

Aurora PostgreSQL 11.18.2, March 3, 2023

General stability enhancements

- Fixed an issue in `PostGIS` where the `GDAL` data wasn't loading.
- Fixed an issue that increased the amount of recovery work during startup if logical replication is enabled.

- Fixed an issue for the better error handling of procedures with large numbers of parameters.
- Fixed an issue with the `aws_s3` extension where loading a large number of records can time out.

Aurora PostgreSQL 11.18.0, January 20, 2023

High priority stability enhancements

- Fixed an issue where an upgrade fails because the oldest `MultiXactId` is updated incorrectly.
- Fixed an issue where the commit latency metrics weren't updated.
- Fixed an issue that could lead to a brief period of unavailability.

General stability enhancements

- Fixed an issue that caused DB instance migration failures.
- Fixed an issue where the DB fails to start because of an inconsistency in the metadata.
- Improved the error handling and diagnosability.
- Upgraded the RDKit extension to version 4.2.
- Upgraded the `GDAL` library to version 3.4.3.
- Fixed an issue with the pg_repack extension.
- Improved the collation library (glibc) handling with a new independent default collation library.

PostgreSQL 11.17 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 11.17. For more information about the improvements in PostgreSQL 11.17, see PostgreSQL release 11.17.

Releases and patches

- Aurora PostgreSQL 11.17.3, October 17, 2023
- Aurora PostgreSQL 11.17.2, March 2, 2023
- Aurora PostgreSQL 11.17.1, December 13, 2022
- Aurora PostgreSQL 11.17.0, November 09, 2022

Aurora PostgreSQL 11.17.3, October 17, 2023

High priority stability enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2023-39417
  - CVE-2023-2455
  - CVE-2023-2454

High priority enhancements

- Fixed an issue which blocked vacuum operations after the restart of an Aurora replica.
- Fixed an issue that would cause high CPU usage and prevent new connections.

General stability enhancements

- Fixed an issue which causes the stats collector process to repeatedly restart.
- Improved the scale times for Aurora Serverless v2.
- Fix a bug which can cause unavailability during ZDP.
- Fixed an issue preventing `pglogical` from logging conflicting rows during the apply phase.
- Fixed an issue where, in rare cases, the `aws_s3` extension could fail to import from an S3 bucket with a name containing dots.
- Provided options to configure the timeouts within the `aws_lambda` extension. By setting the following parameters, customers will now be able to change the connect and request timeouts for AWS Lambda integration:
  - `aws_lambda.connect_timeout_ms`.
  - `aws_lambda.request_timeout_ms`.
- Fixed an issue which can cause a database instance to restart while executing I/O intensive read workloads.
- Updated the `plv8`, `pll`, and `plcoffee` extensions to version 2.3.15.

Aurora PostgreSQL 11.17.2, March 2, 2023

General stability enhancements

- Fixed an issue that increased the amount of recovery work during startup if logical replication is enabled.
- Fixed an issue for better error handling of procedures with large numbers of parameters.
- Fixed an issue with the `aws_s3` extension where loading a large number of records can time out.

Aurora PostgreSQL 11.17.1, December 13, 2022

General stability enhancements

- Fixed an issue that can cause increased network traffic when a writer instance transmits logs to a replica instance.
- Fixed an issue where the engine experiences stability issues during database minor and patch release upgrades.
- Fixed an issue that could cause data inconsistency during replication.

Aurora PostgreSQL 11.17.0, November 09, 2022

General stability enhancements

- Improved buffer cache scavenging when the buffer cache is in duress.
- Fixed an issue in Database Activity Streams that leads to high memory consumption.
- Fixed an issue that caused DB instance restarts.
- Fixed an issue where a DB instance restarts recursively while generating monitoring metrics during a crash.
- Fixed an issue where a DB instance restarted during performance metric collection.
- Fixed an issue where an attempt to connect to the database would fail with SSLV3_ALERT_CERTIFICATE_UNKNOWN.
- Improved the diagnostic logging around setting invalid hint bits.
- Fixed an issue where autovacuum would incorrectly skip tables.
- Improved the logical replication prefetching.

- Fixed a durability issue in the GIN indexes.
- Fixed an issue to detect and cancel stuck major version upgrades.
- Fixed an issue in hash join that could lead to increased memory consumption.
- Improved the logical replication performance.
- Fixed an issue that causes database activity stream inconsistency when the monitoring agent is unavailable.
- Upgraded the `GEOS` version to 3.10.3.
- Updated the `PostGIS` extension to version 3.2.3.
- Fixed an issue with `st_orientedenvelope` that caused it to loop with a 1-D input to return 0.
- Fixed an issue where the connection to SQL Server using tds_fdw fails.

PostgreSQL 11.16 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 11.16. For more information about the improvements in PostgreSQL 11.16, see PostgreSQL release 11.16.

Releases and patches

- Aurora PostgreSQL 11.16.6, October 19, 2023
- Aurora PostgreSQL 11.16.5, December 14, 2022
- Aurora PostgreSQL 11.16.4, November 17, 2022
- Aurora PostgreSQL 11.16.3, October 13, 2022
- Aurora PostgreSQL 11.16.1, July 6, 2022
- Aurora PostgreSQL 11.16.0, June 9, 2022

Aurora PostgreSQL 11.16.6, October 19, 2023

High priority stability enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2023-39417
  - CVE-2023-2455
  - CVE-2023-2454
  - CVE-2022-2625

High priority enhancements

- Fixed an issue which blocked vacuum operations after the restart of an Aurora replica.
- Fixed an issue that would cause high CPU usage and prevent new connections.

General stability enhancements

- Fixed an issue which causes the stats collector process to repeatedly restart.
- Improved the scale times for Aurora Serverless v2.
- Fix a bug which can cause unavailability during ZDP.
- Fixed an issue preventing `pglogical` from logging conflicting rows during the apply phase.
- Fixed an issue where, in rare cases, the `aws_s3` extension could fail to import from an S3 bucket with a name containing dots.
- Provided options to configure the timeouts within the `aws_lambda` extension. By setting the following parameters, customers will now be able to change the connect and request timeouts for AWS Lambda integration:
  - `aws_lambda.connect_timeout_ms`.
  - `aws_lambda.request_timeout_ms`.
- Updated the `plv8`, `pll`, and `plcoffee` extensions to version 2.3.15.
- Introduced diagnostics for transient metadata used for I/O.

Aurora PostgreSQL 11.16.5, December 14, 2022

General stability enhancements

- Fixed an issue where the engine experiences stability issues during database minor and patch release upgrades.
- Fixed an issue that causes database activity stream inconsistency when the monitoring agent is unavailable.
- Fixed an issue that could cause data inconsistency during replication.

Aurora PostgreSQL 11.16.4, November 17, 2022

High priority stability enhancements

- Fixed an issue that can cause increased network traffic when a writer instance transmits logs to a replica instance.

Aurora PostgreSQL 11.16.3, October 13, 2022

High priority stability enhancements

- Fixed a `PLV8` issue where the base parameter doesn't get loaded properly into the memory.

General stability enhancements

- Fixed a bug where Aurora PostgreSQL can't file the relfilenode.
- Fixed a stuck scaling issue when the current scaling event times out.
- Upgraded the `PostGIS` extension to version 3.1.7.
- Fixed an issue where extended query messages might be lost during zero-downtime patching (ZDP) causing the extended query to hang after the ZDP completion.

Aurora PostgreSQL 11.16.1, July 6, 2022

Critical stability enhancements

- Fixed an issue that could cause periods of unavailability during a storage node restart.

High priority stability enhancements

- Fixed an error handling issue related to out-of-memory conditions which could result in brief periods of unavailability.
- Fixed an issue when the connection to SQL Server fails using the `TDS_FDW` extension to query a foreign table.
- Fixed an issue that caused connections using the provided root certificate to fail.
- Improved the diagnostic and supportability information in case of inconsistent B-tree index entries.

Aurora PostgreSQL 11.16.0, June 9, 2022

New features

- Added support for the `large object` module (extension). For more information, see Managing large objects with the lo module.
- Added support for zero-downtime patching (ZDP) for minor version upgrades and patches. For more information, see Minor release upgrades and zero-downtime patching in the *Amazon Aurora User Guide*.

Critical updates

- Fixed a replay crash due to an LSN mismatch.
- Fixed the `aws_s3` extension to prevent invalid region injection.

High stability updates

- Fixed multiple issues related to out-of-memory conditions which could result in brief periods of unavailability.

General stability updates

- Fixed a lock contention crash during an Aurora Serverless v1 scaling event.
- Fixed an issue where logical replication becomes stuck after a restart.
- Fixed multiple issues that could lead to brief periods of unavailability.
- Fixed, during redo, an invalid page hit on the Generic Redo for GENERIC_XLOG_FULL_PAGE_DATA. This happens due to a timing hole between generating the log record and then writing the metadata for the record on the RW node and the RO node replays between those operations.
- Improved the query performance by supporting parallel workers.
- Upgraded the plugin `wal2json` version to 2.4.
- Upgraded the `pglogical` extension to version 2.4.1.

PostgreSQL 11.15 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 11.15. For more information about the improvements in PostgreSQL 11.15, see PostgreSQL release 11.15.

Releases and patches

- Aurora PostgreSQL 11.15.6, December 16, 2022
- Aurora PostgreSQL 11.15.4, July 18, 2022
- Aurora PostgreSQL 11.15.1, April 27, 2022
- Aurora PostgreSQL 11.15.0, March 29, 2022

Aurora PostgreSQL 11.15.6, December 16, 2022

General enhancements

- Fixed an issue that can cause increased network traffic when a writer instance transmits logs to a replica instance.
- Fixed an issue that causes database activity stream inconsistency when the monitoring agent is unavailable.
- Updated the `PostGIS` extension to version 3.1.7.

Aurora PostgreSQL 11.15.4, July 18, 2022

Security enhancements

- Backpatched the PostgreSQL community fix for CVE-2022-1552: Autovacuum, REINDEX, and others omit "security restricted operation". For more information, see CVE-2022-1552.

Critical enhancements

- Fixed an issue during a storage node restart that could result in periods of unavailability.

High stability enhancements

- Fixed an error handling issue related to out-of-memory conditions that could result in brief periods of unavailability.

- Fixed an issue related to the existence of duplicate relation files that could result in periods of unavailability.
- Fixed a defect where the validation of cached plans may lead to a database restart when the plan was previously invalidated.

Aurora PostgreSQL 11.15.1, April 27, 2022

High priority stability enhancements

- Fixed an issue that could cause incorrect `WriteIOPS` reporting in the AWS console.
- Fixed an issue that could cause unavailability after removal of a read node from a cluster.

General enhancements

- Fixed an issue that could cause an engine restart during periods of low free memory.

Aurora PostgreSQL 11.15.0, March 29, 2022

High priority stability enhancements

- Fixed multiple issues that may result in unavailability of a read node.
- Fixed an issue that may result in a read node being unable to replay WAL requiring the replication slot to be dropped and resynchronized.
- Fixed an issue that could cause excess storage use due to files not being properly closed.

General enhancements

- Fixed a small memory leak on read nodes when `commit_ts` is set.
- Fixed an issue that caused Performance Insights to show "Unknown wait event".
- Fixed an issue that could cause an import from Amazon S3 to fail when using the `aws_s3` extension.
- Fixed multiple issues that could result in periods of unavailability when using `apg_plan_mgmt`.
- Fixed multiple issues that could result in periods of unavailability when QPM is enabled.

PostgreSQL 11.14 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 11.14. For more information about the improvements in PostgreSQL 11.14, see PostgreSQL release 11.14.

Releases and patches

- Aurora PostgreSQL 11.14.7, August 24, 2023
- Aurora PostgreSQL 11.14.6, December 16, 2022
- Aurora PostgreSQL 11.14.4, July 20, 2022
- Aurora PostgreSQL 11.14.3, April 13, 2022
- Aurora PostgreSQL 11.14.1
- Aurora PostgreSQL 11.14.0

Aurora PostgreSQL 11.14.7, August 24, 2023

General enhancements

- Fixed an issue which causes the stats collector process to repeatedly restart.
- Fixed an issue preventing `pglogical` from logging conflicting rows during the apply phase.

Aurora PostgreSQL 11.14.6, December 16, 2022

General enhancements

- Fixed an issue that can cause increased network traffic when a writer instance transmits logs to a replica instance.
- Fixed an issue that causes database activity stream inconsistency when the monitoring agent is unavailable.
- Updated the `PostGIS` extension to version 3.1.7.

Aurora PostgreSQL 11.14.4, July 20, 2022

Security enhancements

- Backpatched the PostgreSQL community fix for CVE-2022-1552: Autovacuum, REINDEX, and others omit "security restricted operation". For more information, see CVE-2022-1552.

Critical enhancements

- Fixed an issue during a storage node restart that could result in periods of unavailability.

High stability enhancements

- Fixed an error handling issue related to out-of-memory conditions that could result in brief periods of unavailability.
- Fixed an issue related to the existence of duplicate relation files that could result in periods of unavailability.
- Fixed an issue that could cause excess storage use due to files not being properly closed.
- Fixed an issue that caused Performance Insights to show "Unknown wait event".

Aurora PostgreSQL 11.14.3, April 13, 2022

General enhancements

- Fixed a bug that could cause an engine restart during periods of low free memory.

Aurora PostgreSQL 11.14.1

Security enhancements

- Updated the `PostGIS` extension from version 3.1.4 to 3.1.5. This update contains a `PostGIS` fix for the vulnerability addressed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.
- Modified the `ip4r` extension to mitigate a security issue during create extension. The issue was originally disclosed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.
- Modified the `pg_bigm` extension to mitigate a security issue during create extension. The issue was addressed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.

Aurora PostgreSQL 11.14.0

Critical stability enhancements

- Fixed a bug where logical replication may hang resulting in the replay falling behind on the read node. The instance may eventually restart.

Additional improvements and enhancements

- Fixed a buffer cache bug that could cause brief periods of unavailability.
- Fixed a bug in the `apg_plan_mgmt` extension where an index based plan was not being enforced.
- Fixed a bug in the `pg_logical` extension that could cause brief periods of unavailability due to improper handling of NULL arguments.
- Fixed an issue where orphaned files caused major version upgrades to fail.
- Fixed incorrect Aurora Storage Daemon log write metrics.
- Fixed multiple bugs that could result in WAL replay falling behind and eventually causing the reader instances to restart.
- Improved the Aurora buffer cache page validation on reads.
- Improved the Aurora storage metadata validation.
- Updated the `pg_hint_pan` extension to v1.3.7.

- For information about extensions and modules, see Extensions supported for Aurora PostgreSQL 11.

PostgreSQL 11.13 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 11.13. For more information about the improvements in PostgreSQL 11.13, see PostgreSQL release 11.13.

Releases and patches

- Aurora PostgreSQL 11.13.6, December 19, 2022
- Aurora PostgreSQL 11.13.4, July 6, 2022
- Aurora PostgreSQL 11.13.3, June 6, 2022

- Aurora PostgreSQL 11.13.2, April 12, 2022
- Aurora PostgreSQL 11.13.1
- Aurora PostgreSQL 11.13.0

Aurora PostgreSQL 11.13.6, December 19, 2022

General enhancements

- Fixed an issue that causes database activity stream inconsistency when the monitoring agent is unavailable.

Aurora PostgreSQL 11.13.4, July 6, 2022

Security enhancements

- Backpatched the PostgreSQL community fix for CVE-2022-1552: Autovacuum, REINDEX, and others omit "security restricted operation". For more information, see CVE-2022-1552.

General enhancements

- Fixed an error handling issue related to out-of-memory conditions which could result in brief periods of unavailability.
- Fixed an issue that could cause excess storage use due to files not being properly closed.
- Fixed an issue that could cause Performance Insights to display "Unknown wait event".
- Fixed an issue that could result in periods of unavailability due to the existence of duplicate relation files.

Aurora PostgreSQL 11.13.3, June 6, 2022

Security enhancements

- Backpatched the PostgreSQL community fix for CVE-2022-1552: Autovacuum, REINDEX, and others omit "security restricted operation". For more information, see CVE-2022-1552.

High priority stability updates

- Fixed an issue that can cause a restart of the postmaster process in Amazon Aurora Serverless v1.
- Fixed an issue that can cause a restart of the Aurora Runtime process in Amazon Aurora Serverless v1.

General enhancements

- Fixed a memory leak in the Aurora Runtime that could lead to an out-of-memory condition.

Aurora PostgreSQL 11.13.2, April 12, 2022

General enhancements

- Fixed a buffer cache bug that could cause brief periods of unavailability.

Aurora PostgreSQL 11.13.1

Security enhancements

- Updated the `PostGIS` extension from version 3.1.4 to 3.1.5. This update contains a `PostGIS` fix for the vulnerability addressed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.
- Modified the `ip4r` extension to mitigate a security issue during create extension. The issue was originally disclosed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.
- Modified the `pg_bigm` extension to mitigate a security issue during create extension. The issue was addressed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.

Aurora PostgreSQL 11.13.0

Critical stability enhancements

- Fixed an issue where, in rare circumstances, a data cache of a read node may be inconsistent following a restart of that node.

High priority stability enhancements

- Fixed an issue where queries may become unresponsive due to I/O resource exhaustion triggered by prefetch.
- Fixed an issue where Aurora may flag an issue following a major version update with the message: "PANIC: could not access status of next transaction id xxxxxxxx".

Additional improvements and enhancements

- Fixed an issue which can cause vacuum operations to become blocked after all Aurora read replicas have been removed from a secondary cluster.
- Fixed an issue where read nodes restart due to a replication origin cache lookup failure.
- Fixed an issue where read queries may time out on read nodes during the replay of lazy truncation triggered by vacuum on the write node.
- Fixed an issue that causes Performance Insights to incorrectly set the backend type of a database connection.
- Fixed an issue where the `aurora_postgres_replica_status` function returned stale or lagging CPU stats.
- Fixed an issue where, in rare cases, an Aurora Global Database secondary mirror cluster may restart due to a stall in the log apply process.
- Fixed an issue with the `apg_plan_mgmt` extension where the planning and execution times were reported as 0.
- Removed support for the DES, 3DES, and RC4 cipher suites.
- Updated `PostGIS` extension to version 3.1.4.
- Added support for `postgis_raster` extension version 3.1.4.

PostgreSQL 11.12, Aurora PostgreSQL 3.6 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 11.12. For more information about the improvements in PostgreSQL 11.12, see PostgreSQL release 11.12.

Releases and patches

- Aurora PostgreSQL 11.12.5, December 30, 2022
- Aurora PostgreSQL 11.12.4, July 14, 2022

- Aurora PostgreSQL 3.6.2
- Aurora PostgreSQL 3.6.1
- Aurora PostgreSQL 3.6.0

Aurora PostgreSQL 11.12.5, December 30, 2022

General enhancements

- Fixed an issue that causes database activity stream inconsistency when the monitoring agent is unavailable.

Aurora PostgreSQL 11.12.4, July 14, 2022

Security enhancements

- Backpatched the PostgreSQL community fix for CVE-2022-1552: Autovacuum, REINDEX, and others omit "security restricted operation". For more information, see CVE-2022-1552.

High priority stability enhancements

- Fixed an error handling issue related to out-of-memory conditions which could result in brief periods of unavailability.
- Fixed an issue that could cause excess storage use due to files not being properly closed.
- Fixed an issue that caused Performance Insights to show "Unknown wait event".

Aurora PostgreSQL 3.6.2

Security enhancements

- Modified the `pg_bigm` extension to mitigate a security issue during create extension. The issue was addressed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.
- Modified the `ip4r` extension to mitigate a security issue during create extension. The issue was originally disclosed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.

- Backpatched the PostgreSQL community fix for CVE-2021-3677: “Memory disclosure in certain queries”. CVE-2020-14350
- Backpatched postgis to PostGIS 2.5.2. This is a `PostGIS` fix for the vulnerability addressed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.

Aurora PostgreSQL 3.6.1

Critical stability enhancements

- Fixed an issue where, in rare circumstances, a data cache of a read node may be inconsistent following a restart of that node.

High priority stability enhancements

- Fixed an issue where queries may become unresponsive due to I/O resource exhaustion triggered by prefetch.
- Fixed an issue where Aurora may flag an issue following a major version update with the message: "PANIC: could not access status of next transaction id xxxxxxxx".
- Fixed multiple issues in the Aurora storage daemon that could lead to brief periods of unavailability when specific network configurations are used.
- Fixed an out-of-memory crash issue with Aurora storage daemon that leads to writer node restart. This also reduces the overall system memory consumption.

Additional improvements and enhancements

- Fixed an issue where read nodes restart due to a replication origin cache lookup failure.
- Fixed an issue with the `apg_plan_mgmt` extension where planning and execution time were reported as 0.
- Fixed an issue that causes Performance Insights to incorrectly set the backend type of a database connection.
- Fixed an issue where in rare cases, an Aurora Global Database secondary mirror cluster may restart due to a stall in the log apply process.
- Fixed an issue where orphaned files caused failed translations in read codepaths during or after major version upgrade.

- Fixed multiple issues in the Aurora storage daemon that could lead to brief periods of unavailability when specific network configurations are used.
- Fixed an out-of-memory crash issue with Aurora storage daemon that leads to writer node restart. This also reduces the overall system memory consumption.

Aurora PostgreSQL 3.6.0

High priority stability enhancements

- Fixed an issue where creating a database from an existing template database with tablespace resulted in an error with the message `ERROR: could not open file pg_tblspc/...: No such file or directory`.
- Fixed an issue where, in rare cases, an Aurora replica may be unable to start when a large number of PostgreSQL subtransactions (i.e. SQL savepoints) have been used.
- Fixed an issue where, in rare circumstances, read results may be inconsistent for repeated read requests on replica nodes.

Additional improvements and enhancements

- Upgraded OpenSSL to 1.1.1k.
- Reduced CPU usage and memory consumption of the WAL apply process on Aurora replicas for some workloads.
- Improved metadata protection from accidental erasure.
- Improved safety checks in the write path to detect incorrect writes to metadata.
- Improved security by removing 3DES and other older ciphers for SSL/TLS connections.
- Fixed an issue where a duplicate file entry can prevent the Aurora PostgreSQL engine from starting up.
- Fixed an issue that could cause temporary unavailability under heavy workloads.
- Added back ability to use a leading forward slash in the Amazon S3 path during S3 import.
- Updated the `orafce` extension to version 3.16.

PostgreSQL 11.11, Aurora PostgreSQL 3.5 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 11.11. For more information about the improvements in PostgreSQL 11.11, see PostgreSQL release 11.11.

Releases and patches

- Aurora PostgreSQL 3.5.1
- Aurora PostgreSQL 3.5.0

Aurora PostgreSQL 3.5.1

Security enhancements

- Modified the `pg_bigm` extension to mitigate a security issue during create extension. The issue was addressed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.
- Modified the `ip4r` extension to mitigate a security issue during create extension. The issue was originally disclosed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.
- Backpatched the PostgreSQL community fix for CVE-2021-3677: “Memory disclosure in certain queries”. For more information, see CVE-2021-3677
- Backpatched postgis to PostGIS 2.5.2. This is a `PostGIS` fix for the vulnerability addressed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.
- Backpatched an input validation error in the `log_fdw` extension function parameters.

Aurora PostgreSQL 3.5.0

New features

- Added support for the following extensions:
  - The `pg_proctab` extension version 0.0.9
  - The `pg_bigm` extension version 1.2

High priority stability enhancements

- Fixed a bug where in rare cases a reader had inconsistent results when it restarted while a transaction with more than 64 subtransactions was being processed.
- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2021-32027
  - CVE-2021-32028
  - CVE-2021-32029

Additional improvements and enhancements

- Fixed a bug where the database could not be started when there were many relations in memory-constrained environments.
- Fixed a bug in the `apg_plan_mgmt` extension that could cause brief periods of unavailability due to an internal buffer overflow.
- Fixed a bug on reader nodes that could cause brief periods of unavailability during WAL replay.
- Fixed a bug in the `rds_activity_stream` extension that caused an error during startup when attempting to log audit events.
- Fixed bugs in the `aurora_replica_status` function where rows were sometimes partially populated and some values such as Replay Latency, and CPU usage were always 0.
- Fixed a bug where the database engine would attempt to create shared memory segments larger than the instance total memory and fail repeatedly. For example, attempts to create 128 GiB shared buffers on a db.r5.large instance would fail. With this change, requests for total shared memory allocations larger than the instance memory allow setting the instance to incompatible parameters.
- Added logic to clean up unnecessary `pg_wal` temporary files on a database startup.
- Fixed a bug that reported ERROR: rds_activity_stream stack item 2 not found on top - cannot pop when attempting to create the `rds_activity_stream` extension.
- Fixed a bug that could cause the error failed to build any 3-way joins in a correlated `IN` subquery under an `EXISTS` subquery.
- Backported the following performance improvement from the PostgreSQL community: pg_stat_statements: add missing check for pgss_enabled().
- Fixed a bug that could cause brief periods of unavailability due to running out of memory when creating the `postgis` extension with `pgAudit` enabled.

- Fixed a bug when using outbound logical replication to synchronize changes to another database that could fail with an error message like ERROR: could not map filenode "base/16395/228486645" to relation OID.
- Fixed a bug that could cause a brief period of unavailability when canceling a transaction.
- Fixed a bug where the `rds_ad` role wasn't created after upgrading from a version of Aurora PostgreSQL that doesn't support Microsoft Active Directory authentication.
- Added btree page checks to detect tuple metadata inconsistency.
- Fixed a bug in asynchronous buffer reads that could cause brief periods of unavailability on reader nodes during WAL replay.

PostgreSQL 11.9, Aurora PostgreSQL 3.4

This release of Aurora PostgreSQL is compatible with PostgreSQL 11.9. For more information about the improvements in PostgreSQL 11.9, see PostgreSQL release 11.9.

Releases and patches

- Aurora PostgreSQL 11.9.18, January 15, 2026
- Aurora PostgreSQL 11.9.16, June 18, 2025
- Aurora PostgreSQL 11.9.15 April 29, 2025
- Aurora PostgreSQL 11.9.13, November 22, 2024
- Aurora PostgreSQL 11.9.12, August 7, 2024
- Aurora PostgreSQL 11.9.11, March 13, 2024
- Aurora PostgreSQL 11.9.9, December 27, 2023
- Aurora PostgreSQL 3.4.8, October 10, 2023
- Aurora PostgreSQL 3.4.7, December 22, 2022
- Aurora PostgreSQL 3.4.6, July 8, 2022
- Aurora PostgreSQL 3.4.5
- Aurora PostgreSQL 3.4.3
- Aurora PostgreSQL 3.4.2
- Aurora PostgreSQL 3.4.1
- Aurora PostgreSQL 3.4.0

Aurora PostgreSQL 11.9.18, January 15, 2026

Critical stability enhancements

- Fixed a security issue when altering routine ownership.

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-8713.

    CVE-2025-8714.

    CVE-2025-8715.

    CVE-2025-12817.

    CVE-2025-12818.
- Backported fixes for the following PLv8 extension's V8 Engine security vulnerabilities:
  - CVE-2023-3079.
- Fixed a race condition where old writer instance may not step down after a new writer instance is promoted and continues to write.

General stability enhancements

- Fixed an issue with parallel heap scans that could lead to index inconsistency on tables larger than 16TiB when synchronize_seqscans is enabled.

Aurora PostgreSQL 11.9.16, June 18, 2025

Critical stability enhancements

- Fixed an issue related to the interaction between Aurora Serverless scaling and the improved reader availability functionality that might result in longer recover times and impact availability.
- Fixed an issue in the `rds_activity_stream` extension that could cause brief periods of unavailability during configuration reloads and when maximum connections are consumed.

Aurora PostgreSQL 11.9.15 April 29, 2025

High priority enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2025-1094.

Aurora PostgreSQL 11.9.13, November 22, 2024

High priority enhancements

- Fixed an issue that would cause a longer restart time when `rds.enable_plan_management` is turned on, but apg_plan_mgmt extension is not installed.

Aurora PostgreSQL 11.9.12, August 7, 2024

Critical stability enhancements

- Fixed a pg_repack issue causing two vacuums to concurrently process the same table.
- Fixed a V8 Engine CVE-2018-6065 for PLV8 2.x.

Aurora PostgreSQL 11.9.11, March 13, 2024

General stability enhancements

- Allow `rds_superuser` to terminate backends which are not explicitly associated with a role.
- Upgraded PLV8 extension to version 2.3.15.

High priority stability enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2024-0985

Critical stability enhancements

- Fixed an issue related to `apg_plan_mgmt`.

- Fixed an issue where active transactions during slot creation may be partially replicated by the slot.
- Fixed a deadlock issue in Aurora storage which can result in writer failover.

Aurora PostgreSQL 11.9.9, December 27, 2023

Critical stability enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2023-5870
  - CVE-2023-5869
  - CVE-2023-5868

General stability enhancements

- Fixed an issue with logical replication actions being performed by someone other than the table owner

Aurora PostgreSQL 3.4.8, October 10, 2023

High priority stability enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2023-39417
  - CVE-2023-2455
  - CVE-2023-2454
  - CVE-2022-2625

Aurora PostgreSQL 3.4.7, December 22, 2022

General enhancements

- Fixed an issue that causes database activity stream inconsistency when the monitoring agent is unavailable.

Aurora PostgreSQL 3.4.6, July 8, 2022

Security enhancements

- Backpatched the PostgreSQL community fix for CVE-2022-1552: Autovacuum, REINDEX, and others omit "security restricted operation". For more information, see CVE-2022-1552.

Aurora PostgreSQL 3.4.5

Security enhancements

- Modified the `ip4r` extension to mitigate a security issue during create extension. The issue was originally disclosed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.
- Backpatched the PostgreSQL community fix for CVE-2021-3677: “Memory disclosure in certain queries”. For more information, see CVE-2021-3677
- Backpatched the PostgreSQL community fix for CVE-2021-3393: "Partition constraint violation errors leak values of denied columns". For more information, see CVE-2021-3393
- Backpatched postgis to PostGIS 2.5.2. This is a `PostGIS` fix for the vulnerability addressed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.
- Backpatched an input validation error in the `log_fdw` extension function parameters.

Aurora PostgreSQL 3.4.3

High priority stability enhancements

- Provided a patch for PostgreSQL community security issues CVE-2021-32027, CVE-2021-32028 and CVE-2021-32029.

Additional improvements and enhancements

- Fixed a bug in the `aws_s3` extension to allow import of objects with leading forward slashes in the object identifier.
- Fixed a bug in the `rds_activity_stream` extension that caused an error during startup when attempting to log audit events.

- Fixed a bug that returned an ERROR when attempting to create the `rds_activity_stream` extension.
- Fixed a bug that could cause brief periods of unavailability due to running out of memory when creating the `postgis` extension with `pgAudit` enabled.
- Fixed multiple issues in the Aurora storage daemon that could lead to brief periods of unavailability when specific network configurations are used.

Aurora PostgreSQL 3.4.2

High priority stability enhancements

- Fixed a bug where in rare cases a reader had inconsistent results when it restarted while a transaction with more than 64 subtransactions was being processed.

Additional improvements and enhancements

- Fixed a bug that could lead to intermittent unavailability due to a race condition when handling responses from storage nodes.
- Fixed a bug that could lead to intermittent unavailability due to the rotation of network encryption keys.
- Fixed a bug that could lead to intermittent unavailability due to heat management of the underlying storage segments.
- Fixed a bug where a large S3 import with thousands of clients can cause one or more of the import clients to stop responding.
- Removed a restriction that prevented setting configuration variable strings that contained `brazil`.
- Fixed a bug that could lead to intermittent unavailability if a reader node runs a query that access many tables while the writer node is acquiring exclusive locks on all of the same tables.

Aurora PostgreSQL 3.4.1

Critical stability enhancements

- Fixed a bug that caused a read replica to unsuccessfully restart repeatedly in rare cases.

- Fixed a bug where a cluster became unavailable when attempting to create more than 16 read replicas or Aurora global database secondary AWS Regions. The cluster became available again when the new read replica or secondary AWS Region was removed.

Additional improvements and enhancements

- Fixed a bug that when under heavy load, snapshot import, COPY import, or S3 import stopped responding in rare cases.
- Fixed a bug where a read replica might not join the cluster when the writer was very busy with a write-intensive workload.
- Fixed a bug where a cluster could be unavailable briefly when a high-volume S3 import was running.
- Fixed a bug that caused a cluster to take several minutes to restart if a logical replication stream was terminated while handling many complex transactions.
- Disallowed the use of both IAM and Kerberos authentication for the same user.

Aurora PostgreSQL 3.4.0

New features

- Aurora PostgreSQL now supports invocation of AWS Lambda functions. This includes the new `aws_lambda` extension. For more information, see Invoking an AWS Lambda function from an Aurora PostgreSQL DB cluster in the *Amazon Aurora User Guide*.
- The db.r6g instance classes are now available in preview for Aurora. For more information, see Aurora DB instance classes in the *Amazon Aurora User Guide*.

Critical stability enhancements

- None

High priority stability enhancements

- Fixed a bug in Aurora PostgreSQL replication that could result in the error message ERROR: `MultiXactId` nnnn has not been created yet -- apparent wraparound.
- Fixed a bug where in some cases, DB clusters that have logical replication enabled did not remove truncated WAL segment files from storage. This resulted in volume size growth.

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2020-25694
  - CVE-2020-25695
  - CVE-2020-25696
- Fixed a bug in the `pg_stat_statements` extension that caused excessive CPU consumption.

Additional improvements and enhancements

- You can now use `pg_replication_slot_advance` to advance a logical replication slot for the roles `rds_replication` and `rds_superuser`.
- Improved the asynchronous mode performance of database activity streams.
- Reduced the delay when publishing to CloudWatch the `rpo_lag_in_msec` metric for Aurora global database clusters.
- Aurora PostgreSQL no longer falls behind on a read node when the backend is blocked writing to the database client.
- Fixed a bug that in rare cases caused a brief period of unavailability on a read replica when the storage volume grew.
- Fixed a bug when creating a database that could return the following: ERROR: could not create directory on local disk
- Updated data grid files to fix errors or incorrect transformation results from the `ST_Transform` method of the `PostGIS` extension.
- Fixed a bug where in some cases replaying `XLOG_BTREE_REUSE_PAGE` records on Aurora reader instances caused unnecessary replay lag.
- Fixed a small memory leak in a b-tree index that could lead to an out of memory condition.
- Fixed a bug in the `GiST` index that could result in an out of memory condition after promoting an Aurora read replica.
- Fixed an S3 import bug that reported ERROR: HTTP 403. Permission denied when importing data from a file inside an S3 subfolder.
- Fixed a bug in the `aws_s3` extension for pre-signed URL handling that could result in the error message S3 bucket names with a period (.) are not supported.
- Fixed a bug in the `aws_s3` extension where an import might be blocked indefinitely if an exclusive lock was taken on the relation prior to beginning the operation.

- Fixed a bug related to replication when Aurora PostgreSQL is acting as a physical replica of an RDS for PostgreSQL instance that uses `GiST` indexes. In rare cases, this bug caused a brief period of unavailability after promoting the Aurora cluster.
- Fixed a bug in database activity streams where customers were not notified of the end of an outage.
- Updated the `pg_audit` extension to version 1.3.1.

PostgreSQL 11.8, Aurora PostgreSQL 3.3 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 11.8. For more information about the improvements in PostgreSQL 11.8, see PostgreSQL release 11.8.

Releases and patches

- Aurora PostgreSQL release 3.3.2
- Aurora PostgreSQL 3.3.1
- Aurora PostgreSQL 3.3.0

Aurora PostgreSQL release 3.3.2

Critical stability enhancements

- None

High priority stability enhancements

- Fixed a bug in Aurora PostgreSQL replication that could result in the error message ERROR: `MultiXactId` nnnn has not been created yet -- apparent wraparound.
- Fixed a bug where in some cases, DB clusters that have logical replication enabled did not remove truncated WAL segment files from storage. This resulted in volume size growth.
- Fixed an issue with creating a global database cluster in a secondary region.
- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2020-25694
  - CVE-2020-25695
  - CVE-2020-25696

- Fixed a bug in the `pg_stat_statements` extension that caused excessive CPU consumption.

Additional improvements and enhancements

- Aurora PostgreSQL no longer falls behind on a read node when the backend is blocked writing to the database client.
- Reduced the delay when publishing to CloudWatch the `rpo_lag_in_msec` metric for Aurora global database clusters.
- Fixed a bug where a `DROP DATABASE` statement didn't remove any relation files.
- Fixed a bug where in some cases replaying `XLOG_BTREE_REUSE_PAGE` records on Aurora reader instances caused unnecessary replay lag.
- Fixed a small memory leak in a b-tree index that could lead to an out of memory condition.
- Fixed a bug in the `aurora_replica_status()` function where the `server_id` field was sometimes truncated.
- Fixed a bug where a log record was incorrectly processed causing the Aurora replica to crash.
- Fixed an S3 import bug that reported ERROR: HTTP 403. Permission denied when importing data from a file inside an S3 subfolder.
- You can now use `pg_replication_slot_advance` to advance a logical replication slot for the roles `rds_replication` and `rds_superuser`.
- Improved performance of the asynchronous mode for database activity streams.
- Fixed a bug in the `aws_s3` extension that could result in the error message S3 bucket names with a period (.) are not supported.
- Fixed a race condition that caused valid imports to intermittently fail.
- Fixed a bug related to replication when Aurora PostgreSQL is acting as a physical replica of an RDS for PostgreSQL instance that uses GiST indexes. In rare cases, this bug caused a brief period of unavailability after promoting the Aurora DB cluster.
- Fixed a bug in the `aws_s3` extension where an import may be blocked indefinitely if an exclusive lock was taken on the relation prior to beginning the operation.

Aurora PostgreSQL 3.3.1

You can find the following improvements in this release.

Critical stability enhancements

1. Fixed a bug that appears when the `NOT EXISTS` operator incorrectly returns TRUE, which can only happen when the following unusual set of circumstances occurs:
   - A query is using the `NOT EXISTS` operator.
   - The column or columns being evaluated against the outer query in the `NOT EXISTS` subquery contain a NULL value.
   - There isn't a another predicate in the subquery that removes the need for the evaluation of the NULL values.
   - The filter used in the subquery does not use an index seek for its execution.
   - The operator isn't converted to a join by the query optimizer.

Aurora PostgreSQL 3.3.0

New features

- Added support for the RDKit extension version 3.8.

  The RDKit extension provides modeling functions for cheminformatics. Cheminformatics is storing, indexing, searching, retrieving, and applying information about chemical compounds. For example, with the RDKit extension you can construct models of molecules, search for molecular structures, and read or create molecules in various notations. You can also perform research on data loaded from the ChEMBL website or a SMILES file. The Simplified Molecular Input Line Entry System (SMILES) is a typographical notation for representing molecules and reactions. For more information, see The RDKit database cartridge in the RDKit documentation.
- Added support for a minimum TLS version

  Support for a minimum Transport Layer Security (TLS) version is back ported from PostgreSQL 12. It allows the Aurora PostgreSQL server to constrain the TLS protocols with which a client is allowed to connect via two new PostgreSQL parameters. These parameters include ssl_min_protocol_versionand ssl_max_protocol_version. For example, to limit client connections to the Aurora PostgreSQL server to at least TLS 1.2 protocol version, set the `ssl_min_protocol_version` to `TLSv1.2`.
- Added support for the `pglogical` extension version 2.2.2.

  The `pglogical` extension is a logical streaming replication system that provides additional features beyond what's available in PostgreSQL native logical replication. Features include

conflict handling, row filtering, DDL/sequence replication and delayed apply. You can use the `pglogical` extension to set up replication between Aurora PostgreSQL clusters, between RDS for PostgreSQL and Aurora PostgreSQL, and with PostgreSQL databases running outside of RDS.

- Aurora dynamically resizes your cluster storage space. With dynamic resizing, the storage space for your Aurora DB cluster automatically decreases when you remove data from the DB cluster. For more information, see Storage scaling in the *Amazon Aurora User Guide*.

> **Note**
>
> The dynamic resizing feature is being deployed in phases to the AWS Regions where Aurora is available. Depending on the Region where your cluster is, this feature might not be available yet. For more information, see the What's New announcement.

Critical stability enhancements

- Fixed a bug related to heap page extend that in rare cases resulted in longer recovery time and impacted availability.

High priority stability enhancements

- Fixed a bug in Aurora Global Database that could cause delays in upgrading the database engine in a secondary AWS Region. For more information, see Using Amazon Aurora global databases in the *Amazon Aurora User Guide*.
- Fixed a bug that in rare cases caused delays in upgrading a database to engine version 11.8.

Additional improvements and enhancements

- Fixed a bug where the Aurora replica crashed when workloads with heavy subtransactions are made on the writer instance.
- Fixed a bug where the writer instance crashed due to a memory leak and the depletion of memory used to track active transactions.
- Fixed a bug that lead to a crash due to improper initialization when there is no free memory available during PostgreSQL backend startup.
- Fixed a bug where an Aurora PostgreSQL Serverless DB cluster might return the following error after a scaling event: ERROR: prepared statement "S_6" already exists.

- Fixed an out-of-memory problem when issuing the `CREATE EXTENSION` command with PostGIS when Database Activity Streams is enabled.
- Fixed a bug where a `SELECT` query might incorrectly return the error Attempting to read past EOF of relation rrrr. blockno=bbb nblocks=nnn.
- Fixed a bug where the database might be unavailable briefly due to error handling in database storage growth.
- Fixed a bug in Aurora PostgreSQL Serverless where queries that executed on previously idle connections got delayed until the scale operation completed.
- Fixed a bug where an Aurora PostgreSQL DB cluster with Database Activity Streams enabled might report the beginning of a potential loss window for activity records, but does not report the restoration of connectivity.
- Fixed a bug with the `aws_s3.table_import_from_s3` function where a `COPY` from S3 failed with the error HTTP error code: 248. For more information, see aws_s3.table_import_from_s3 in the *Amazon Aurora User Guide*.

PostgreSQL 11.7, Aurora PostgreSQL 3.2 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 11.7. For more information about the improvements in PostgreSQL 11.7, see PostgreSQL release 11.7.

Releases and patches

- Aurora PostgreSQL 3.2.7
- Aurora PostgreSQL 3.2.6
- Aurora PostgreSQL 3.2.4
- Aurora PostgreSQL 3.2.3
- Aurora PostgreSQL 3.2.2
- Aurora PostgreSQL 3.2.1

Aurora PostgreSQL 3.2.7

You can find the following improvements in this release.

Critical stability enhancements

- None

High priority stability enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2020-25694
  - CVE-2020-25695
  - CVE-2020-25696

Additional improvements and enhancements

- None

Aurora PostgreSQL 3.2.6

You can find the following improvements in this release.

Critical stability enhancements

- None

High priority stability enhancements

- Fixed a bug in Aurora PostgreSQL replication that might result in the error message, ERROR: `MultiXactId` nnnn has not been created yet -- apparent wraparound.

Additional improvements and enhancements

- Fixed a bug that in rare cases caused brief read replica unavailability when storage volume grew.
- Aurora PostgreSQL Serverless now supports execution of queries on all connections during a scale event.
- Fixed a bug in Aurora PostgreSQL Serverless where a leaked lock resulted in a prolonged scale event.
- Fixed a bug where the `aurora_replica_status` function showed truncated server identifiers.
- Fixed a bug in Aurora PostgreSQL Serverless where connections being migrated during a scale event disconnected with the message: "ERROR: could not open relation with OID ....
- Fixed a small memory leak in a b-tree index that could lead to an out of memory condition.

- Fixed a bug in a GiST index that might result in an out-of-memory condition after promoting an Aurora Read Replica.
- Improved performance for Database Activity Streams.
- Fixed a bug in Database Activity Streams where customers were not notified when an outage ended.
- Fixed a bug in the `aws_s3` extension for pre-signed URL handling that could have resulted in the error message S3 bucket names with a period (.) are not supported.
- Fixed a bug in the `aws_s3` extension where incorrect error handling could lead to failures during the import process.
- Fixed a bug in the `aws_s3` extension where an import may be blocked indefinitely if an exclusive lock was taken on the relation prior to beginning the operation.

Aurora PostgreSQL 3.2.4

You can find the following improvements in this release.

Critical stability enhancements

1. Fixed a bug that appears when the `NOT EXISTS` operator incorrectly returns TRUE, which can only happen when the following unusual set of circumstances occurs:
   - A query is using the `NOT EXISTS` operator.
   - The column or columns being evaluated against the outer query in the `NOT EXISTS` subquery contain a NULL value.
   - There isn't a another predicate in the subquery that removes the need for the evaluation of the NULL values.
   - The filter used in the subquery does not use an index seek for its execution.
   - The operator isn't converted to a join by the query optimizer.

Aurora PostgreSQL 3.2.3

You can find the following improvements in this release.

Critical stability enhancements

- None

High priority stability enhancements

- None

Additional improvements and enhancements

- Fixed a bug in Aurora PostgreSQL Serverless where queries that ran on previously idle connections got delayed until the scale operation completed.
- Fixed a bug that might cause brief unavailability for heavy subtransaction workloads when multiple reader instances restart or rejoin the cluster.

Aurora PostgreSQL 3.2.2

You can find the following improvements in this release.

Critical stability enhancements

- Fixed a bug related to heap page extend that in rare cases resulted in longer recovery time and impacted availability.

High priority stability enhancements

- Fixed a bug in Aurora Global Database that could cause delays in upgrading the database engine in a secondary region. For more information, see Using Amazon Aurora global databases in the *Amazon Aurora User Guide*.
- Fixed a bug that in rare cases caused delays in upgrading a database to engine version 11.7.

Additional improvements and enhancements

- Fixed a bug where the database might be unavailable briefly due to error handling in database storage growth.
- Fixed a bug where a SELECT query might incorrectly return the error, Attempting to read past EOF of relation rrrr. blockno=bbb nblocks=nnn.
- Fixed a bug where an Aurora PostgreSQL Serverless DB cluster might return the following error after a scaling event: ERROR: prepared statement "S_6" already exists.

Aurora PostgreSQL 3.2.1

New features

- Added support for Amazon Aurora PostgreSQL Global Database. For more information, see Using Amazon Aurora global databases in the *Amazon Aurora User Guide*.
- Added the ability to configure the recovery point objective (RPO) of a global database for Aurora PostgreSQL. For more information, see Managing RPOs for Aurora PostgreSQL–based global databases in the *Amazon Aurora User Guide*.

You can find the following improvements in this release.

Critical stability enhancements

None.

High priority stability enhancements

- Improved performance and availability of read instances when applying DROP TABLE and TRUNCATE TABLE operations.
- Fixed a small but continuous memory leak in a diagnostic module that could lead to an out-of-memory condition on smaller DB instance types.
- Fixed a bug in the `PostGIS` extension which could lead to a database restart. This has been reported to the PostGIS community as https://trac.osgeo.org/postgis/ticket/4646.
- Fixed a bug where read requests might stop responding due to incorrect error handling in the storage engine.
- Fixed a bug that fails for some queries and results in the message ERROR: found xmin xxxxxx from before relfrozenxid yyyyyyy. This could occur following the promotion of a read instance to a write instance.
- Fixed a bug where an Aurora serverless DB cluster might crash while rolling back a scale attempt.

Additional improvements and enhancements

- Improved performance for queries that read many rows from storage.
- Improved performance and availability of reader DB instances during heavy read workload.
- Enabled correlated IN and NOT IN subqueries to be transformed to joins when possible.

- Improved the filtering estimation for enhanced semi-join filter pushdown by using multi-column statistics or indexes when available.
- Improved read performance of the `pg_prewarm` extension.
- Fixed a bug where an Aurora serverless DB cluster might report the message ERROR: incorrect binary data format in bind parameter ... following a scale event.
- Fixed a bug where a serverless DB cluster might report the message ERROR: insufficient data left in message following a scale event.
- Fixed a bug where an Aurora serverless DB cluster can experience prolonged or failed scale attempts.
- Fixed a bug that resulted in the message ERROR: could not create file "base/xxxxxx/yyyyyyy" as a previous version still exists on disk: Success. Please contact AWS customer support. This can occur during object creation after PostgreSQL's 32-bit object identifier has wrapped around.
- Fixed a bug where the write-ahead-log (WAL) segment files for PostgreSQL logical replication were not deleted when changing the `wal_level` value from `logical` to `replica`.
- Fixed a bug in the `pg_hint_plan` extension where a multi-statement query could lead to a crash when `enable_hint_table` is enabled. This is tracked in the PostgreSQL community as https://github.com/ossc-db/pg_hint_plan/issues/25.
- Fixed a bug where JDBC clients might report the message java.io.IOException: Unexpected packet type: 75 following a scale event in an Aurora serverless DB cluster.
- Fixed a bug in PostgreSQL logical replication that resulted in the message ERROR: snapshot reference is not owned by resource owner TopTransaction.
- Changed the following extensions:
  - Updated `orafce` to version 3.8
  - Updated pgTAP to version 1.1
- Provided support for fault injection queries.

PostgreSQL 11.6, Aurora PostgreSQL 3.1 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 11.6. For more information about the improvements in PostgreSQL 11.6, see PostgreSQL release 11.6.

This release contains multiple critical stability enhancements. Amazon highly recommends upgrading your Aurora PostgreSQL clusters that use older PostgreSQL 11 engines to this release.

Releases and patches

- Aurora PostgreSQL 3.1.4
- Aurora PostgreSQL 3.1.3
- Aurora PostgreSQL 3.1.2
- Aurora PostgreSQL 3.1.1
- Aurora PostgreSQL 3.1.0

Aurora PostgreSQL 3.1.4

You can find the following improvements in this release.

Critical stability enhancements

- None

High priority stability enhancements

- Backported fixes for the following PostgreSQL community security issues:
  - CVE-2020-25694
  - CVE-2020-25695
  - CVE-2020-25696

Additional improvements and enhancements

- None

Aurora PostgreSQL 3.1.3

New features

- Aurora PostgreSQL now supports the PostgreSQL vacuum_truncate storage parameter to manage vacuum truncation for specific tables. Set this storage parameter to false for a table to prevent the VACUUM SQL command from truncating the table's trailing empty pages.

Critical stability enhancements

- None

High priority stability enhancements

- Fixed a bug where reads from storage might stop responding due to incorrect error handling.

Additional improvements and enhancements

- None

Aurora PostgreSQL 3.1.2

This release contains a critical stability enhancement. Amazon highly recommends updating your older Aurora PostgreSQL 11-compatible clusters to this release.

Critical stability enhancements

- Fixed a bug in which a reader DB instance might temporarily use stale data. This could lead to wrong results such as too few or too many rows. This error is not persisted on storage, and will clear when the database page containing the row has been evicted from cache. This can happen when the primary DB instance enters a transaction snapshot overflow due to having more than 64 subtransactions in a single transaction. Applications susceptible to this bug include those that use SQL savepoints or PostgreSQL exception handlers with more than 64 subtransactions in the top transaction.

High priority stability enhancements

- Fixed a bug that might cause a reader DB instance to crash causing unavailability while attempting to the join the DB cluster. This can happen in some cases when the primary DB instance has a transaction snapshot overflow due to a high number of subtransactions. In this situation the reader DB instance will be unable to join until the snapshot overflow has cleared.

Additional improvements and enhancements

- Fixed a bug that prevented Performance Insights from determining the query ID of a running statement.

Aurora PostgreSQL 3.1.1

You can find the following improvements in this release.

Critical stability enhancements

- Fixed a bug in which the DB instance might be briefly unavailable due to the self-healing function of the underlying storage.

High priority stability enhancements

- Fixed a bug in which the database engine might crash causing unavailability. This occurred while scanning an included, non-key column of a B-Tree index. This only applies to PostgreSQL 11 "included column" indexes.
- Fixed a bug that might cause the database engine to crash causing unavailability. This occurred if a newly established database connection encountered a resource exhaustion-related error during initialization after successful authentication.

Additional improvements and enhancements

- Provided a fix for the `pg_hint_plan` extension that could lead the database engine to crash causing unavailability. The open source issue can be tracked at https://github.com/ossc-db/pg_hint_plan/pull/45.
- Fixed a bug where SQL of the form `ALTER FUNCTION ... OWNER TO ...` incorrectly reported `ERROR: improper qualified name (too many dotted names)`.
- Improved the performance of `GIN` index vacuum via prefetching.
- Fixed a bug in open source PostgreSQL that could lead to a database engine crash causing unavailability. This occurred during parallel B-Tree index scans. This issue has been reported to the PostgreSQL community.
- Improved the performance of in-memory B-Tree index scans.

Aurora PostgreSQL 3.1.0

You can find the following new features and improvements in this engine version.

New features

1. Support for exporting data to Amazon S3. For more information, see Exporting data from an Aurora PostgreSQL DB cluster to Amazon S3 in the *Amazon Aurora User Guide*.
2. Support for Amazon Aurora Machine Learning. For more information, see Using machine learning (ML) with Aurora PostgreSQL in the *Amazon Aurora User Guide*.
3. SQL processing enhancements include:
   - Optimizations for `NOT IN` with the `apg_enable_not_in_transform` parameter.
   - Semi-join filter pushdown enhancements for hash joins with the `apg_enable_semijoin_push_down` parameter.
   - Optimizations for redundant inner join removal with the `apg_enable_remove_redundant_inner_joins` parameter.
   - Improved ANSI compatibility options with the `ansi_constraint_trigger_ordering`, `ansi_force_foreign_key_checks` and `ansi_qualified_update_set_target` parameters.

   For more information, see Amazon Aurora PostgreSQL parameters in the *Amazon Aurora User Guide*.
4. New and updated PostgreSQL extensions include:
   - The new `aws_ml` extension. For more information, see Using machine learning (ML) with Aurora PostgreSQL in the *Amazon Aurora User Guide*.
   - The new `aws_s3` extension. For more information, see Exporting data from an Aurora PostgreSQL DB cluster to Amazon S3 in the *Amazon Aurora User Guide*.
   - Updates to the `apg_plan_mgmt` extension. For more information, see Managing query execution plans for Aurora PostgreSQL in the *Amazon Aurora User Guide*.

Critical stability enhancements

1. Fixed a bug related to creating B-tree indexes on temporary tables that in rare cases might result in longer recovery time, and impact availability.
2. Fixed a bug related to replication when Aurora PostgreSQL is acting as a physical replica of an RDS for PostgreSQL instance. In rare cases, this bug causes a log write failure that might result in longer recovery time, and impact availability.
3. Fixed a bug related to handling of reads with high I/O latency that in rare cases might result in longer recovery time, and impact availability.

High priority stability enhancements

1. Fixed a bug related to logical replication in which `wal` segments are not properly removed from storage. This can result in storage bloat. To monitor this, view the `TransactionLogDiskUsage` parameter.
2. Fixed multiple bugs, which cause Aurora to crash during prefetch operations on Btree indexes.
3. Fixed a bug in which an Aurora restart might time out when logical replication is used.
4. Enhanced the validation checks performed on data blocks in the buffer cache. This improves Aurora's detection of inconsistency.

Additional improvements and enhancements

1. The query plan management extension `apg_plan_mgmt` has an improved algorithm for managing plan generation for highly partitioned tables.
2. Reduced startup time on instances with large caches via improvements in the buffer cache recovery algorithm.
3. Improved the performance of the read-node-apply process under high transaction rate workloads by using changes to PostgreSQL `LWLock` prioritization. These changes prevent starvation of the read-node-apply process while the PostgreSQL `ProcArray` is under heavy contention.
4. Improved handling of batch reads during vacuum, table scans, and index scans. This results in greater throughput and lower CPU consumption.
5. Fixed a bug in which a read node might crash during the replay of a PostgreSQL `SLRU`-truncate operation.
6. Fixed a bug where in rare cases, database writes might stall following an error returned by one of the six copies of an Aurora log record.
7. Fixed a bug related to logical replication where an individual transaction larger than 1 GB in size might result in an engine crash.
8. Fixed a memory leak on read nodes when cluster cache management is enabled.
9. Fixed a bug in which importing an RDS for PostgreSQL snapshot might stop responding if the source snapshot contains a large number of unlogged relations.
10. Fixed a bug in which the Aurora storage daemon might crash under heavy I/O load.

11 Fixed a bug related to `hot_standby_feedback` for read nodes in which the read node might report the wrong transaction id epoch to the write node. This can cause the write node to ignore the `hot_standby_feedback` and invalidate snapshots on the read node.

12 Fixed a bug in which storage errors that occur during `CREATE DATABASE` statements are not properly handled. The bug left the resulting database inaccessible. The correct behavior is to fail the database creation and return the appropriate error to the user.

13 Improved handling of PostgreSQL snapshot overflow when a read node attempts to connect to a write node. Prior to this change, if the write node was in a snapshot overflow state, the read node was unable to join. A message appeared in the PostgreSQL log file in the form `DEBUG: recovery snapshot waiting for non-overflowed snapshot or until oldest active xid on standby is at least` *`xxxxxxx`* (now *`yyyyyyy`*). A snapshot overflow occurs when an individual transaction has created over 64 subtransactions.

14 Fixed a bug related to common table expressions in which an error is incorrectly raised when a NOT IN class exists in a CTE. The error is `CTE with NOT IN fails with ERROR: could not find CTE` *`CTE-Name`*.

15 Fixed a bug related to an incorrect `last_error_timestamp` value in the `aurora_replica_status` table.

16 Fixed a bug to avoid populating shared buffers with blocks belonging to temporary objects. These blocks correctly reside in PostgreSQL backend local buffers.

17 Changed the following extensions:

- Updated `pg_hint_plan` to version 1.3.4.
- Added `plprofiler` version 4.1.
- Added `pgTAP` version 1.0.0.

PostgreSQL 11.4, Aurora PostgreSQL 3.0 (Deprecated)

> **Note**
>
> The PostgreSQL engine version 11.4 with the Aurora PostgreSQL 3.0 is no longer supported. To upgrade, see Upgrading the PostgreSQL DB engine for Aurora PostgreSQL in the *Amazon Aurora User Guide*.

This release of Aurora PostgreSQL is compatible with PostgreSQL 11.4. For more information about the improvements in PostgreSQL 11.4, see PostgreSQL release 11.4.

You can find the following improvements in this release.

Improvements

1. This release contains all fixes, features, and improvements present in Aurora PostgreSQL 2.3.5.
2. Partitioning – Partitioning improvements include support for hash partitioning, enabling creation of a default partition, and dynamic row movement to another partition based on the key column update.
3. Performance – Performance improvements include parallelism while creating indexes, materialized views, hash joins, and sequential scans to make the operations perform better.
4. Stored procedures – SQL stored procedures now added support for embedded transactions.
5. Autovacuum improvements – To provide valuable logging, the parameter `rds.force_autovacuum_logging` is ON by default in conjunction with the `log_autovacuum_min_duration` parameter set to 10 seconds. To increase autovacuum effectiveness, the values for the `autovacuum_max_workers` and `autovacuum_vacuum_cost_limit` parameters are computed based on host memory capacity to provide larger default values.
6. Improved transaction timeout – The parameter `idle_in_transaction_session_timeout` is set to 24 hours. Any session that has been idle more than 24 hours is terminated.
7. The `tsearch2` module is no longer supported – If your application uses `tsearch2` functions, update it to use the equivalent functions provided by the core PostgreSQL engine. For more information about the tsearch2 module, see PostgreSQL tsearch2.
8. The `chkpass` module is no longer supported – For more information about the chkpass module, see PostgreSQL chkpass.
9. Updated the following extensions:
   - `address_standardizer` to version 2.5.1
   - `address_standardizer_data_us` to version 2.5.1
   - `btree_gin` to version 1.3
   - `citext` to version 1.5
   - `cube` to version 1.4
   - `hstore` to version 1.5
   - `ip4r` to version 2.2

- `isn` to version 1.2
- `orafce` to version 3.7
- `pg_hint_plan` to version 1.3.4
- `pg_prewarm` to version 1.2
- `pg_repack` to version 1.4.4
- `pg_trgm` to version 1.4
- `pgaudit` to version 1.3
- `pgrouting` to version 2.6.1
- `pgtap` to version 1.0.0
- `plcoffee` to version 2.3.8
- `plls` to version 2.3.8
- `plv8` to version 2.3.8
- `postgis` to version 2.5.1
- `postgis_tiger_geocoder` to version 2.5.1
- `postgis_topology` to version 2.5.1
- `rds_activity_stream` to version 1.3

PostgreSQL 10 versions (Deprecated)

Version updates

- PostgreSQL 10.21 (Deprecated)
- PostgreSQL 10.20 (Deprecated)
- PostgreSQL 10.19 (Deprecated)
- PostgreSQL 10.18 (Deprecated)
- PostgreSQL 10.17, Aurora PostgreSQL 2.9 (Deprecated)
- PostgreSQL 10.16, Aurora PostgreSQL 2.8 (Deprecated)
- PostgreSQL 10.14, Aurora PostgreSQL 2.7 (Deprecated)
- PostgreSQL 10.13, Aurora PostgreSQL 2.6 (Deprecated)
- PostgreSQL 10.12, Aurora PostgreSQL 2.5 (Deprecated)
- PostgreSQL 10.11, Aurora PostgreSQL 2.4 (Deprecated)

- PostgreSQL 10.7, Aurora PostgreSQL 2.3 (Deprecated)
- PostgreSQL 10.6, Aurora PostgreSQL 2.2 (Deprecated)
- PostgreSQL 10.5, Aurora PostgreSQL 2.1 (Deprecated)
- PostgreSQL 10.4, Aurora PostgreSQL 2.0 (Deprecated)

PostgreSQL 10.21 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 10.21. For more information about the improvements in PostgreSQL 10.21, see PostgreSQL release 10.21.

Releases and patches

- Aurora PostgreSQL 10.21.5, December 14, 2022
- Aurora PostgreSQL 10.21.4, November 17, 2022
- Aurora PostgreSQL 10.21.3, October 13, 2022
- Aurora PostgreSQL 10.21.1, July 6, 2022
- Aurora PostgreSQL 10.21.0, June 9, 2022

Aurora PostgreSQL 10.21.5, December 14, 2022

General stability enhancements

- Fixed an issue where the engine experienced stability issues.

Aurora PostgreSQL 10.21.4, November 17, 2022

High priority stability enhancements

- Fixed an issue that can cause increased network traffic when a writer instance transmits logs to a replica instance.

Aurora PostgreSQL 10.21.3, October 13, 2022

High priority stability enhancements

- Fixed a PLV8 issue where the base parameter doesn't get loaded properly into the memory.

General stability enhancements

- Fixed a bug where Aurora PostgreSQL can't file the relfilenode.
- Fixed a stuck scaling issue when the current scaling event times out.
- Upgraded the `PostGIS` extension to version 3.1.7.
- Fixed an issue where extended query messages might be lost during zero-downtime patching (ZDP) causing the extended query to hang after the ZDP completion.

Aurora PostgreSQL 10.21.1, July 6, 2022

Critical stability enhancements

- Fixed an issue that could cause periods of unavailability during a storage node restart.

High priority stability enhancements

- Fixed an error handling issue related to out-of-memory conditions which could result in brief periods of unavailability.
- Fixed an issue when the connection to SQL Server fails using the `TDS_FDW` extension to query a foreign table.
- Fixed an issue that caused connections using the provided root certificate to fail.
- Improved the diagnostic and supportability information in case of inconsistent B-tree index entries.

Aurora PostgreSQL 10.21.0, June 9, 2022

New features

- Added support for the `large object` module (extension). For more information, see Managing large objects with the lo module.
- Added support for zero-downtime patching (ZDP) for minor version upgrades and patches. For more information, see Minor release upgrades and zero-downtime patching in the *Amazon Aurora User Guide*.

Critical updates

- Fixed a replay crash due to an LSN mismatch.
- Fixed the `aws_s3` extension to prevent invalid region injection.

High stability updates

- Fixed multiple issues related to out-of-memory conditions which could result in brief periods of unavailability.

General stability updates

- Fixed a lock contention crash during an Aurora Serverless v1 scaling event.
- Fixed an issue where logical replication becomes stuck after a restart.
- Fixed multiple issues that could lead to brief periods of unavailability.
- Fixed, during redo, an invalid page hit on the Generic Redo for GENERIC_XLOG_FULL_PAGE_DATA. This happens due to a timing hole between generating the log record and then writing the metadata for the record on the RW node and the RO node replays between those operations.
- Improved the query performance by supporting parallel workers.
- Upgraded the plugin `wal2json` version to 2.4.
- Upgraded the `pglogical` extension to version 2.4.1.

PostgreSQL 10.20 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 10.20. For more information about the improvements in PostgreSQL 10.20, see PostgreSQL release 10.20.

Releases and patches

- Aurora PostgreSQL 10.20.6, December 16, 2022
- Aurora PostgreSQL 10.20.4, July 18, 2022
- Aurora PostgreSQL 10.20.1, April 27, 2022
- Aurora PostgreSQL 10.20.0, March 29, 2022

Aurora PostgreSQL 10.20.6, December 16, 2022

General enhancements

- Fixed an issue that can cause increased network traffic when a writer instance transmits logs to a replica instance.
- Updated the PostGIS extension to version 3.1.7.

Aurora PostgreSQL 10.20.4, July 18, 2022

Security enhancements

- Backpatched the PostgreSQL community fix for CVE-2022-1552: Autovacuum, REINDEX, and others omit "security restricted operation". For more information, see CVE-2022-1552.

Critical enhancements

- Fixed an issue during a storage node restart that could result in periods of unavailability.

High stability enhancements

- Fixed an error handling issue related to out-of-memory conditions that could result in brief periods of unavailability.
- Fixed an issue related to the existence of duplicate relation files that could result in periods of unavailability.
- Fixed a defect where the validation of cached plans may lead to a database restart when the plan was previously invalidated.

Aurora PostgreSQL 10.20.1, April 27, 2022

High priority stability enhancements

- Fixed an issue that could cause incorrect `WriteIOPS` reporting in the AWS console.
- Fixed an issue that could cause unavailability after removal of a read node from a cluster.

General enhancements

- Fixed an issue that could cause an engine restart during periods of low free memory.

Aurora PostgreSQL 10.20.0, March 29, 2022

High priority stability enhancements

- Fixed multiple issues that may result in unavailability of a read node.
- Fixed an issue that may result in a read node being unable to replay WAL requiring the replication slot to be dropped and resynchronized.
- Fixed an issue that could cause excess storage use due to files not being properly closed.

General enhancements

- Fixed a small memory leak on read nodes when `commit_ts` is set.
- Fixed an issue that caused Performance Insights to show "Unknown wait event".
- Fixed an issue that could cause an import from S3 to fail when using the `aws_s3` extension.
- Fixed multiple issues that could result in periods of unavailability when using `apg_plan_mgmt`.
- Fixed multiple issues that could result in periods of unavailability when QPM is enabled.

PostgreSQL 10.19 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 10.19. For more information about the improvements in PostgreSQL 10.19, see PostgreSQL release 10.19.

Releases and patches

- Aurora PostgreSQL 10.19.6, December 16, 2022
- Aurora PostgreSQL 10.19.4, July 20, 2022
- Aurora PostgreSQL 10.19.3, April 13, 2022
- Aurora PostgreSQL 10.19.1
- Aurora PostgreSQL 10.19.0

Aurora PostgreSQL 10.19.6, December 16, 2022

General enhancements

- Fixed an issue that can cause increased network traffic when a writer instance transmits logs to a replica instance.
- Fixed an issue that causes database activity stream inconsistency when the monitoring agent is unavailable.
- Updated the PostGIS extension to version 3.1.7.

Aurora PostgreSQL 10.19.4, July 20, 2022

Security enhancements

- Backpatched the PostgreSQL community fix for CVE-2022-1552: Autovacuum, REINDEX, and others omit "security restricted operation". For more information, see CVE-2022-1552.

Critical enhancements

- Fixed an issue during a storage node restart that could result in periods of unavailability.

High stability enhancements

- Fixed an error handling issue related to out-of-memory conditions that could result in brief periods of unavailability.
- Fixed an issue related to the existence of duplicate relation files that could result in periods of unavailability.
- Fixed an issue that could cause excess storage use due to files not being properly closed.
- Fixed an issue that caused Performance Insights to show "Unknown wait event".

Aurora PostgreSQL 10.19.3, April 13, 2022

General enhancements

- Fixed a bug that could cause an engine restart during periods of low free memory.

Aurora PostgreSQL 10.19.1

Security enhancements

- Updated the `PostGIS` extension from version 3.1.4 to 3.1.5. This update contains a PostGIS fix for the vulnerability addressed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.
- Modified the `ip4r` extension to mitigate a security issue during create extension. The issue was originally disclosed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.

Aurora PostgreSQL 10.19.0

Critical stability enhancements

- Fixed a bug where logical replication may hang resulting in the replay falling behind on the read node. The instance may eventually restart.

Additional improvements and enhancements

- Fixed a buffer cache bug that could cause brief periods of unavailability.
- Fixed a bug in the `apg_plan_mgmt` extension where an index based plan was not being enforced.
- Fixed a bug in the `pg_logical` extension that could cause brief periods of unavailability due to improper handling of NULL arguments.
- Fixed an issue where orphaned files caused major version upgrades to fail.
- Fixed incorrect Aurora Storage Daemon log write metrics.
- Fixed multiple bugs that could result in WAL replay falling behind and eventually causing the reader instances to restart.
- Improved the Aurora buffer cache page validation on reads.
- Improved the Aurora storage metadata validation.
- Updated the `pg_hint_pan` extension to v1.3.6.

PostgreSQL 10.18 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 10.18. For more information about the improvements in PostgreSQL 10.18, see PostgreSQL release 10.18.

Releases and patches

- Aurora PostgreSQL 10.18.6, December 19, 2022
- Aurora PostgreSQL 10.18.4, July 6, 2022
- Aurora PostgreSQL 10.18.3, June 6, 2022
- Aurora PostgreSQL 10.18.2, April 12, 2022
- Aurora PostgreSQL 10.18.1
- Aurora PostgreSQL 10.18.0

Aurora PostgreSQL 10.18.6, December 19, 2022

General enhancements

- Fixed an issue that causes database activity stream inconsistency when the monitoring agent is unavailable.

Aurora PostgreSQL 10.18.4, July 6, 2022

Security enhancements

- Backpatched the PostgreSQL community fix for CVE-2022-1552: Autovacuum, REINDEX, and others omit "security restricted operation". For more information, see CVE-2022-1552.

General enhancements

- Fixed an error handling issue related to out-of-memory conditions which could result in brief periods of unavailability.
- Fixed an issue that could cause excess storage use due to files not being properly closed.
- Fixed an issue that could cause Performance Insights to display "Unknown wait event".
- Fixed an issue that could result in periods of unavailability due to the existence of duplicate relation files.

Aurora PostgreSQL 10.18.3, June 6, 2022

Security enhancements

- Backpatched the PostgreSQL community fix for CVE-2022-1552: Autovacuum, REINDEX, and others omit "security restricted operation". For more information, see CVE-2022-1552.

High priority stability updates

- Fixed an issue that can cause a restart of the postmaster process in Amazon Aurora Serverless v1.
- Fixed an issue that can cause a restart of the Aurora Runtime process in Amazon Aurora Serverless v1.

General enhancements

- Fixed a memory leak in the Aurora Runtime that could lead to an out-of-memory condition.

Aurora PostgreSQL 10.18.2, April 12, 2022

General updates

- Fixed a buffer cache bug that could cause brief periods of unavailability.

Aurora PostgreSQL 10.18.1

Security enhancements

- Updated the `PostGIS` extension from version 3.1.4 to 3.1.5. This update contains a PostGIS fix for the vulnerability addressed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.
- Modified the `ip4r` extension to mitigate a security issue during create extension. The issue was originally disclosed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.

Aurora PostgreSQL 10.18.0

Critical stability updates

- Fixed an issue where, in rare circumstances, a data cache of a read node may be inconsistent following a restart of that node.

High priority stability updates

- Fixed an issue where queries may become unresponsive due to I/O resource exhaustion triggered by prefetch.
- Fixed an issue where Aurora may flag an issue following a major version update with the message: "PANIC: could not access status of next transaction id xxxxxxxx".

Additional improvements and enhancements

- Fixed an issue which can cause vacuum operations to become blocked after all Aurora read replicas have been removed from a secondary cluster.
- Fixed an issue where read nodes restart due to a replication origin cache lookup failure.
- Fixed an issue where read queries may time out on read nodes during the replay of lazy truncation triggered by vacuum on the write node.
- Fixed an issue that causes Performance Insights to incorrectly set the backend type of a database connection.
- Fixed an issue where the aurora_postgres_replica_status() function returned stale or lagging CPU stats.
- Fixed an issue where, in rare cases, an Aurora Global Database secondary mirror cluster may restart due to a stall in the log apply process.
- Removed support for the DES, 3DES, and RC4 cipher suites.
- Updated `PostGIS` extension to version 3.1.4.
- Added support for `postgis_raster` extension version 3.1.4.

PostgreSQL 10.17, Aurora PostgreSQL 2.9 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 10.17. For more information about the improvements in PostgreSQL 10.17, see PostgreSQL release 10.17.

Releases and patches

- Aurora PostgreSQL 10.17.5, December 30, 2022
- Aurora PostgreSQL 10.17.4, July 14, 2022
- Aurora PostgreSQL 2.9.2
- Aurora PostgreSQL 2.9.1
- Aurora PostgreSQL 2.9

Aurora PostgreSQL 10.17.5, December 30, 2022

General enhancements

- Amazon Aurora PostgreSQL version 10.17.5 was released with general enhancements.

Aurora PostgreSQL 10.17.4, July 14, 2022

Security enhancements

- Backpatched the PostgreSQL community fix for CVE-2022-1552: Autovacuum, REINDEX, and others omit "security restricted operation". For more information, see CVE-2022-1552.

High priority stability enhancements

- Fixed an error handling issue related to out-of-memory conditions which could result in brief periods of unavailability.
- Fixed an issue that could cause excess storage use due to files not being properly closed.
- Fixed an issue that caused Performance Insights to show "Unknown wait event".

Aurora PostgreSQL 2.9.2

Security enhancements

- Modified the `ip4r` extension to mitigate a security issue during create extension. The issue was originally disclosed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.

- Modified the `ip4r` extension to mitigate a security issue during create extension. The issue was originally disclosed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.
- Backpatched postgis to `PostGIS` 2.4.7. This is a `PostGIS` fix for the vulnerability addressed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.

Aurora PostgreSQL 2.9.1

Critical stability updates

- Fixed an issue where, in rare circumstances, a data cache of a read node may be inconsistent following a restart of that node.

High priority stability updates

- Fixed an issue where queries may become unresponsive due to I/O resource exhaustion triggered by prefetch.
- Fixed an issue where Aurora may flag an issue following a major version update with the message: "PANIC: could not access status of next transaction id xxxxxxxx".

Additional improvements and enhancements

- Fixed an issue where read nodes restart due to a replication origin cache lookup failure.
- Fixed an issue where in rare cases, an Aurora Global Database secondary mirror cluster may restart due to a stall in the log apply process.
- Fixed an issue that causes Performance Insights to incorrectly set the backend type of a database connection.
- Fixed an issue where orphaned files caused failed translations in read codepaths during or after major version upgrade.
- Fixed multiple issues in the Aurora storage daemon that could lead to brief periods of unavailability when specific network configurations are used.
- Fixed an out-of-memory crash issue with Aurora storage daemon that leads to writer node restart. This also reduces the overall system memory consumption.

Aurora PostgreSQL 2.9

High priority stability updates

1. Fixed an issue where creating a database from an existing template database with tablespace resulted in an error with the message `ERROR: could not open file pg_tblspc/...: No such file or directory`.
2. Fixed an issue where, in rare cases, an Aurora replica may be unable to start when a large number of PostgreSQL subtransactions (i.e. SQL savepoints) have been used.
3. Fixed an issue where, in rare circumstances, read results may be inconsistent for repeated read requests on replica nodes.

Additional improvements and enhancements

1. Upgraded OpenSSL to 1.1.1k.
2. Reduced CPU usage and memory consumption of the WAL apply process on Aurora replicas for some workloads.
3. Improved safety checks in the write path to detect incorrect writes to metadata.
4. Improved security by removing 3DES and other older ciphers for SSL/TLS connections.
5. Fixed an issue where a duplicate file entry can prevent the Aurora PostgreSQL engine from starting up.
6. Fixed an issue that could cause temporary unavailability under heavy workloads.
7. Added back ability to use a leading forward slash in the S3 path during S3 import.
8. Updated the orafce extension to version 3.16.
9. Updated the `PostGIS` extension to version 2.4.7.

PostgreSQL 10.16, Aurora PostgreSQL 2.8 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 10.16. For more information about the improvements in PostgreSQL 10.16, see PostgreSQL release 10.16.

Releases and patches

- Aurora PostgreSQL 2.8.1
- Aurora PostgreSQL 2.8.0

Aurora PostgreSQL 2.8.1

Security enhancements

- Modified the `ip4r` extension to mitigate a security issue during create extension. The issue was originally disclosed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.
- Backpatched postgis to `PostGIS` 2.4.4. This is a `PostGIS` fix for the vulnerability addressed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.
- Backpatched an input validation error in the `log_fdw` extension function parameters.

Aurora PostgreSQL 2.8.0

High priority stability updates

1. Fixed a bug where in rare cases a reader had inconsistent results when it restarted while a transaction with more than 64 subtransactions was being processed.
2. Backported fixes for the following PostgreSQL community security issues:
   - CVE-2021-32027
   - CVE-2021-32028
   - CVE-2021-32029

Additional improvements and enhancements

1. Fixed a bug where the database could not be started when there were many relations in memory-constrained environments.
2. Fixed a bug in the `apg_plan_mgmt` extension that could cause brief periods of unavailability due to an internal buffer overflow.
3. Fixed a bug on reader nodes that could cause brief periods of unavailability during WAL replay.
4. Fixed a bug in the `rds_activity_stream` extension that caused an error during startup when attempting to log audit events.
5. Fixed a bug that prevented minor version updates of an Aurora global database cluster.
6. Fixed bugs in the `aurora_replica_status` function where rows were sometimes partially populated and some values such as Replay Latency, and CPU usage were always 0.

7. Fixed a bug where the database engine would attempt to create shared memory segments larger than the instance total memory and fail repeatedly. For example, attempts to create 128 GiB shared buffers on a db.r5.large instance would fail. With this change, requests for total shared memory allocations larger than the instance memory allow setting the instance to incompatible parameters.
8. Added logic to clean up unnecessary `pg_wal` temporary files on a database startup.
9. Fixed a bug that reported ERROR: rds_activity_stream stack item 2 not found on top - cannot pop when attempting to create the `rds_activity_stream` extension.
10. Fixed a bug that could cause the error failed to build any 3-way joins in a correlated `IN` subquery under an `EXISTS` subquery.
11. Fixed a bug that could cause brief periods of unavailability due to running out of memory when creating the `postgis` extension with `pgAudit` enabled.
12. Fixed a bug when using outbound logical replication to synchronize changes to another database that could fail with an error message like ERROR: could not map filenode "base/16395/228486645" to relation OID.
13. Fixed a bug where the `rds_ad` role wasn't created after upgrading from a version of Aurora PostgreSQL that doesn't support Microsoft Active Directory authentication.
14. Added btree page checks to detect tuple metadata inconsistency.
15. Fixed a bug in asynchronous buffer reads that could cause brief periods of unavailability on reader nodes during WAL replay.

PostgreSQL 10.14, Aurora PostgreSQL 2.7 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 10.14. For more information about the improvements in PostgreSQL 10.14, see PostgreSQL release 10.14.

Releases and patches

- Aurora PostgreSQL 2.7.5
- Aurora PostgreSQL 2.7.3
- Aurora PostgreSQL 2.7.2
- Aurora PostgreSQL 2.7.1
- Aurora PostgreSQL 2.7.0

Aurora PostgreSQL 2.7.5

Security enhancements

- Modified the `ip4r` extension to mitigate a security issue during create extension. The issue was originally disclosed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.
- Backpatched postgis to PostGIS 2.4.4. This is a `PostGIS` fix for the vulnerability addressed in core PostgreSQL by CVE-2020-14350. For more information, see CVE-2020-14350.
- Backpatched an input validation error in the `log_fdw` extension function parameters.

Aurora PostgreSQL 2.7.3

High priority stability updates

1. Provided a patch for PostgreSQL community security issues CVE-2021-32027, CVE-2021-32028 and CVE-2021-32029.

Additional improvements and enhancements

1. Fixed a bug in the `aws_s3` extension to allow import of objects with leading forward slashes in the object identifier.
2. Fixed a bug in the `rds_activity_stream` extension that caused an error during startup when attempting to log audit events.
3. Fixed a bug that returned an `ERROR` when attempting to create the `rds_activity_stream` extension.
4. Fixed a bug that could cause brief periods of unavailability due to running out of memory when creating the `postgis` extension with `pgAudit` enabled.
5. Fixed multiple issues in the Aurora storage daemon that could lead to brief periods of unavailability when specific network configurations are used.

Aurora PostgreSQL 2.7.2

High priority stability updates

1. Fixed a bug where a reader node might render an extra or missing row if the reader restarted while the writer node is processing a long transaction with more than 64 subtransactions.

Additional improvements and enhancements

1. Fixed a bug that could lead to intermittent unavailability due to the rotation of network encryption keys.
2. Fixed a bug where a large S3 import with thousands of clients can cause one or more of the import clients to stop responding.

Aurora PostgreSQL 2.7.1

Critical stability updates

1. Fixed a bug that caused a read replica to unsuccessfully restart repeatedly in rare cases.
2. Fixed a bug where a cluster became unavailable when attempting to create more than 16 read replicas or Aurora global database secondary AWS Regions. The cluster became available again when the new read replica or secondary AWS Region was removed.

Additional improvements and enhancements

1. Fixed a bug that when under heavy load, snapshot import, COPY import, or S3 import stopped responding in rare cases.
2. Fixed a bug where a read replica might not join the cluster when the writer was very busy with a write-intensive workload.
3. Fixed a bug that caused a cluster to take several minutes to restart if a logical replication stream was terminated while handling many complex transactions.
4. Disallowed the use of both IAM and Kerberos authentication for the same user.

Aurora PostgreSQL 2.7.0

Critical stability updates

- None

High priority stability updates

1. Backported fixes for the following PostgreSQL community security issues:
   - CVE-2020-25694
   - CVE-2020-25695
   - CVE-2020-25696
2. Fixed a bug in Aurora PostgreSQL replication that could result in the error message ERROR: `MultiXactId` nnnn has not been created yet -- apparent wraparound.
3. Fixed a bug where in some cases, DB clusters that have logical replication enabled did not remove truncated WAL segment files from storage. This resulted in volume size growth.
4. Fixed a bug in the `pg_stat_statements` extension that caused excessive CPU consumption.

Additional improvements and enhancements

1. Improved the asynchronous mode performance of database activity streams.
2. Aurora Serverless v1 for PostgreSQL now supports query execution on all connections during a scale event.
3. Reduced the delay when publishing to CloudWatch the `rpo_lag_in_msec` metric for Aurora global database clusters.
4. Fixed a bug in Serverless clusters where transaction processing was unnecessarily suspended for long periods when creating a scale point.
5. Fixed a bug in Aurora Serverless v1 for PostgreSQL where a leaked lock resulted in a prolonged scale event.
6. Fixed a bug in Aurora Serverless v1 for PostgreSQL where connections being migrated during a scale event was disconnected with the following message: ERROR: could not open relation with OID ...
7. Aurora PostgreSQL no longer falls behind on a read node when the backend is blocked writing to the database client.
8. Fixed a bug that in rare cases caused a brief period of unavailability on a read replica when the storage volume grew.
9. Fixed a bug when creating a database that could return the following error: ERROR: could not create directory on local disk
10. Fixed a bug where in some cases replaying `XLOG_BTREE_REUSE_PAGE` records on Aurora reader instances caused unnecessary replay lag.

11 Fixed a bug in the `GiST` index that could result in an out of memory condition after promoting an Aurora read replica.

12 Fixed a bug where the `aurora_replica_status` function showed truncated server identifiers.

13 Fixed an S3 import bug that reported ERROR: HTTP 403. Permission denied when importing data from a file inside an S3 subfolder.

14 Fixed a bug in the `aws_s3` extension for pre-signed URL handling that could result in the error message S3 bucket names with a period (.) are not supported.

15 Fixed a bug in the `aws_s3` extension where an import might be blocked indefinitely if an exclusive lock was taken on the relation prior to beginning the operation.

16 Fixed a bug related to replication when Aurora PostgreSQL is acting as a physical replica of an RDS for PostgreSQL instance that uses `GiST` indexes. In rare cases, this bug caused a brief period of unavailability after promoting the Aurora cluster.

17 Fixed a bug in database activity streams where customers were not notified of the end of an outage.

PostgreSQL 10.13, Aurora PostgreSQL 2.6 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 10.13. For more information about the improvements in PostgreSQL 10.13, see PostgreSQL release 10.13.

Releases and patches

- Aurora PostgreSQL release 2.6.2
- Aurora PostgreSQL 2.6.1
- Aurora PostgreSQL 2.6.0

Aurora PostgreSQL release 2.6.2

Critical stability updates

1. None

High priority stability updates

1. Fixed a bug in Aurora PostgreSQL replication that could result in the error message ERROR: `MultiXactId` nnnn has not been created yet -- apparent wraparound.

2. Fixed a bug where in some cases, DB clusters that have logical replication enabled did not remove truncated WAL segment files from storage. This resulted in volume size growth.
3. Fixed an issue with creating a global database cluster in a secondary region.
4. Backported fixes for the following PostgreSQL community security issues:
   - CVE-2020-25694
   - CVE-2020-25695
   - CVE-2020-25696
5. Fixed a bug in the `pg_stat_statements` extension that caused excessive CPU consumption.

Additional improvements and enhancements

1. Aurora PostgreSQL no longer falls behind on a read node when the backend is blocked writing to the database client.
2. Reduced the delay when publishing to CloudWatch the `rpo_lag_in_msec` metric for Aurora global database clusters.
3. Fixed a bug where a `DROP DATABASE` statement didn't remove any relation files.
4. Fixed a bug where in some cases replaying `XLOG_BTREE_REUSE_PAGE` records on Aurora reader instances caused unnecessary replay lag.
5. Fixed a small memory leak in a b-tree index that could lead to an out of memory condition.
6. Fixed a bug in the `aurora_replica_status()` function where the `server_id` field was sometimes truncated.
7. Fixed a bug where a log record was incorrectly processed causing the Aurora replica to crash.
8. Fixed an S3 import bug that reported ERROR: HTTP 403. Permission denied when importing data from a file inside an S3 subfolder.
9. Improved performance of the asynchronous mode for database activity streams.
10. Fixed a bug in the `aws_s3` extension that could result in the error message S3 bucket names with a period (.) are not supported.
11. Fixed a race condition that caused valid imports to intermittently fail.
12. Fixed a bug related to replication when Aurora PostgreSQL is acting as a physical replica of an RDS for PostgreSQL instance that uses GiST indexes. In rare cases, this bug caused a brief period of unavailability after promoting the Aurora DB cluster.
13. Fixed a bug in the `aws_s3` extension where an import may be blocked indefinitely if an exclusive lock was taken on the relation prior to beginning the operation.

Aurora PostgreSQL 2.6.1

You can find the following improvements in this release.

Critical stability enhancements

1. Fixed a bug that appears when the `NOT EXISTS` operator incorrectly returns TRUE, which can only happen when the following unusual set of circumstances occurs:
   - A query is using the `NOT EXISTS` operator.
   - The column or columns being evaluated against the outer query in the `NOT EXISTS` subquery contain a NULL value.
   - There isn't a another predicate in the subquery that removes the need for the evaluation of the NULL values.
   - The filter used in the subquery does not use an index seek for its execution.
   - The operator isn't converted to a join by the query optimizer.

Aurora PostgreSQL 2.6.0

You can find the following improvements in this release.

New features

1. Added support for the RDKit extension version 3.8.

   The RDKit extension provides modeling functions for cheminformatics. Cheminformatics is storing, indexing, searching, retrieving, and applying information about chemical compounds. For example, with the RDKit extension you can construct models of molecules, search for molecular structures, and read or create molecules in various notations. You can also perform research on data loaded from the ChEMBL website or a SMILES file. The Simplified Molecular Input Line Entry System (SMILES) is a typographical notation for representing molecules and reactions. For more information, see The RDKit database cartridge in the RDKit documentation.
2. Added support for the `pglogical` extension version 2.2.2.

   The `pglogical` extension is a logical streaming replication system that provides additional features beyond what's available in PostgreSQL native logical replication. Features include conflict handling, row filtering, DDL/sequence replication and delayed apply. You can use the

`pglogical` extension to set up replication between Aurora PostgreSQL clusters, between RDS for PostgreSQL and Aurora PostgreSQL, and with PostgreSQL databases running outside of RDS.

3. Aurora dynamically resizes your cluster storage space. With dynamic resizing, the storage space for your Aurora DB cluster automatically decreases when you remove data from the DB cluster. For more information, see Storage scaling in the *Amazon Aurora User Guide*.

> **Note**
>
> The dynamic resizing feature is being deployed in phases to the AWS Regions where Aurora is available. Depending on the Region where your cluster is, this feature might not be available yet. For more information, see the What's New announcement.

Critical stability updates

1. Fixed a bug related to heap page extend that in rare cases resulted in longer recovery time and impacted availability.

High priority stability updates

1. Fixed a bug when upgrading Aurora Global Database clusters from 10.11.
2. Fixed a bug in Aurora Global Database that could cause delays in upgrading the database engine in a secondary AWS Region. For more information, see Using Amazon Aurora global databases in the *Amazon Aurora User Guide*.
3. Fixed a bug that in rare cases caused delays in upgrading a database to engine version 10.13.

Additional improvements and enhancements

1. Fixed a bug where the Aurora replica crashed when workloads with heavy subtransactions are made on the writer instance.
2. Fixed a bug where the writer instance crashed due to a memory leak and the depletion of memory used to track active transactions.
3. Fixed a bug that lead to a crash due to improper initialization when there is no free memory available during PostgreSQL backend startup.
4. Fixed a bug where an Aurora PostgreSQL Serverless DB cluster might return the following error after a scaling event: ERROR: prepared statement "S_6" already exists.

5. Fixed an out-of-memory problem when issuing the `CREATE EXTENSION` command with `PostGIS` when Database Activity Streams is enabled.
6. Fixed a bug where a `SELECT` query might incorrectly return the error Attempting to read past EOF of relation rrrr. blockno=bbb nblocks=nnn.
7. Fixed a bug where the database might be unavailable briefly due to error handling in database storage growth.
8. Fixed a bug in Aurora PostgreSQL Serverless where queries that executed on previously idle connections got delayed until the scale operation completed.
9. Fixed a bug where an Aurora PostgreSQL DB cluster with Database Activity Streams enabled might report the beginning of a potential loss window for activity records, but does not report the restoration of connectivity.

PostgreSQL 10.12, Aurora PostgreSQL 2.5 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 10.12. For more information about the improvements in PostgreSQL 10.12, see PostgreSQL release 10.12.

Releases and patches

- Aurora PostgreSQL 2.5.7
- Aurora PostgreSQL 2.5.6
- Aurora PostgreSQL 2.5.4
- Aurora PostgreSQL 2.5.3
- Aurora PostgreSQL 2.5.2
- Aurora PostgreSQL 2.5.1

Aurora PostgreSQL 2.5.7

You can find the following improvements in this release.

Critical stability updates

- None

High priority stability updates

1. Backported fixes for the following PostgreSQL community security issues:
   - CVE-2020-25694
   - CVE-2020-25695
   - CVE-2020-25696

Additional improvements and enhancements

- None

Aurora PostgreSQL 2.5.6

You can find the following improvements in this release.

Critical stability updates

- None

High priority stability updates

1. Fixed a bug in Aurora PostgreSQL replication that might result in the error message, ERROR: `MultiXactId` nnnn has not been created yet -- apparent wraparound.

Additional improvements and enhancements

1. Fixed a bug that in rare cases caused brief read replica unavailability when storage volume grew.
2. Aurora PostgreSQL Serverless now supports execution of queries on all connections during a scale event.
3. Fixed a bug in Aurora PostgreSQL Serverless where a leaked lock resulted in a prolonged scale event.
4. Fixed a bug where the `aurora_replica_status` function showed truncated server identifiers.
5. Fixed a bug in Aurora PostgreSQL Serverless where connections being migrated during a scale event disconnected with the message: "ERROR: could not open relation with OID ....
6. Fixed a bug in a GiST index that might result in an out-of-memory condition after promoting an Aurora Read Replica.

7. Improved performance for Database Activity Streams.
8. Fixed a bug in Database Activity Streams where customers were not notified when an outage ended.
9. Fixed a bug in the `aws_s3` extension for pre-signed URL handling that could have resulted in the error message S3 bucket names with a period (.) are not supported.
10. Fixed a bug in the `aws_s3` extension where incorrect error handling could lead to failures during the import process.
11. Fixed a bug in the `aws_s3` extension where an import may be blocked indefinitely if an exclusive lock was taken on the relation prior to beginning the operation.

Aurora PostgreSQL 2.5.4

You can find the following improvements in this release.

Critical stability enhancements

1. Fixed a bug that appears when the `NOT EXISTS` operator incorrectly returns TRUE, which can only happen when the following unusual set of circumstances occurs:
   - A query is using the `NOT EXISTS` operator.
   - The column or columns being evaluated against the outer query in the `NOT EXISTS` subquery contain a NULL value.
   - There isn't a another predicate in the subquery that removes the need for the evaluation of the NULL values.
   - The filter used in the subquery does not use an index seek for its execution.
   - The operator isn't converted to a join by the query optimizer.

Aurora PostgreSQL 2.5.3

You can find the following improvements in this release.

Critical stability enhancements

- None

High priority stability enhancements

- None

Additional improvements and enhancements

1. Fixed a bug in Aurora PostgreSQL Serverless where queries that ran on previously idle connections got delayed until the scale operation completed.
2. Fixed a bug that might cause brief unavailability for heavy subtransaction workloads when multiple reader instances restart or rejoin the cluster.
3. Fixed a bug in Aurora PostgreSQL Global Database where upgrading a secondary cluster might result in failure due to incorrect checksum versioning. This might have required re-creating the secondary clusters.

Aurora PostgreSQL 2.5.2

You can find the following improvements in this release.

Critical stability updates

1. Fixed a bug related to heap page extend that in rare cases resulted in longer recovery time and impacted availability.

High priority stability updates

1. Fixed a bug in Aurora Global Database that could cause delays in upgrading the database engine in a secondary region. For more information, see Using Amazon Aurora global databases in the *Amazon Aurora User Guide*.
2. Fixed a bug that in rare cases caused delays in upgrading a database to engine version 10.12.

Additional improvements and enhancements

1. Fixed a bug where the database might be unavailable briefly due to error handling in database storage growth.
2. Fixed a bug where a SELECT query might incorrectly return the error, Attempting to read past EOF of relation rrrr. blockno=bbb nblocks=nnn.

3. Fixed a bug where an Aurora PostgreSQL Serverless DB cluster might return the following error after a scaling event: ERROR: prepared statement "S_6" already exists.

Aurora PostgreSQL 2.5.1

New features

1. Added support for Amazon Aurora PostgreSQL Global Database. For more information, see Using Amazon Aurora global databases in the *Amazon Aurora User Guide*.
2. Added the ability to configure the recovery point objective (RPO) of a global database for Aurora PostgreSQL. For more information, see Managing RPOs for Aurora PostgreSQL–based global databases in the *Amazon Aurora User Guide*.

You can find the following improvements in this release.

Critical stability updates

None.

High priority stability updates

1. Improved performance and availability of read instances when applying DROP TABLE and TRUNCATE TABLE operations.
2. Fixed a small but continuous memory leak in a diagnostic module that could lead to an out-of-memory condition on smaller DB instance types.
3. Fixed a bug in the `PostGIS` extension which could lead to a database restart. This has been reported to the PostGIS community as https://trac.osgeo.org/postgis/ticket/4646.
4. Fixed a bug where read requests might stop responding due to incorrect error handling in the storage engine.
5. Fixed a bug that fails for some queries and results in the message ERROR: found xmin xxxxxx from before relfrozenxid yyyyyyy. This could occur following the promotion of a read instance to a write instance.
6. Fixed a bug where an Aurora serverless DB cluster might crash while rolling back a scale attempt.

Additional improvements and enhancements

1. Improved performance for queries that read many rows from storage.
2. Improved performance and availability of reader DB instances during heavy read workload.
3. Enabled correlated IN and NOT IN subqueries to be transformed to joins when possible.
4. Improved read performance of the `pg_prewarm` extension.
5. Fixed a bug where an Aurora serverless DB cluster might report the message ERROR: incorrect binary data format in bind parameter ... following a scale event.
6. Fixed a bug where a serverless DB cluster might report the message ERROR: insufficient data left in message following a scale event.
7. Fixed a bug where an Aurora serverless DB cluster may experience prolonged or failed scale attempts.
8. Fixed a bug that resulted in the message ERROR: could not create file "base/xxxxxx/yyyyyyy" as a previous version still exists on disk: Success. Please contact AWS customer support. This can occur during object creation after PostgreSQL's 32-bit object identifier has wrapped around.
9. Fixed a bug where the write-ahead-log (WAL) segment files for PostgreSQL logical replication were not deleted when changing the `wal_level` value from `logical` to `replica`.
10. Fixed a bug in the `pg_hint_plan` extension where a multi-statement query could lead to a crash when `enable_hint_table` is enabled. This is tracked in the PostgreSQL community as https://github.com/ossc-db/pg_hint_plan/issues/25.
11. Fixed a bug where JDBC clients might report the message java.io.IOException: Unexpected packet type: 75 following a scale event in an Aurora serverless DB cluster.
12. Fixed a bug in PostgreSQL logical replication that resulted in the message ERROR: snapshot reference is not owned by resource owner TopTransaction.
13. Changed the following extensions:
    - Updated `orafce` to version 3.8

PostgreSQL 10.11, Aurora PostgreSQL 2.4 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 10.11. For more information about the improvements in PostgreSQL 10.11, see PostgreSQL release 10.11.

This release contains multiple critical stability updates. Amazon highly recommends upgrading your Aurora PostgreSQL clusters that use older PostgreSQL 10 engines to this release.

Releases and patches

- Aurora PostgreSQL 2.4.4
- Aurora PostgreSQL 2.4.3
- Aurora PostgreSQL 2.4.2
- Aurora PostgreSQL 2.4.1
- Aurora PostgreSQL 2.4.0

Aurora PostgreSQL 2.4.4

You can find the following improvements in this release.

Critical stability updates

- None

High priority stability updates

1. Backported fixes for the following PostgreSQL community security issues:
   - CVE-2020-25694
   - CVE-2020-25695
   - CVE-2020-25696

Additional improvements and enhancements

- None

Aurora PostgreSQL 2.4.3

New features

1. Aurora PostgreSQL now supports the PostgreSQL vacuum_truncate storage parameter to manage vacuum truncation for specific tables. Set this storage parameter to false for a table to prevent the VACUUM SQL command from truncating the table's trailing empty pages.

Critical stability updates

- None

High priority stability updates

1. Fixed a bug where reads from storage might stop responding due to incorrect error handling.

Additional improvements and enhancements

- None

Aurora PostgreSQL 2.4.2

You can find the following improvements in this release.

Critical stability updates

1. Fixed a bug in which a reader DB instance might temporarily use stale data. This could lead to wrong results such as too few or too many rows. This error is not persisted on storage, and will clear when the database page containing the row has been evicted from cache. This can happen when the primary DB instance enters a transaction snapshot overflow due to having more than 64 subtransactions in a single transaction. Applications susceptible to this bug include those that use SQL savepoints or PostgreSQL exception handlers with more than 64 subtransactions in the top transaction.

High priority stability updates

1. Fixed a bug that may cause a reader DB instance to crash causing unavailability while attempting to the join the DB cluster. This can happen in some cases when the primary DB instance has a transaction snapshot overflow due to a high number of subtransactions. In this situation the reader DB instance will be unable to join until the snapshot overflow has cleared.

Additional improvements and enhancements

1. Fixed a bug that prevented Performance Insights from determining the query ID of a running statement.

Aurora PostgreSQL 2.4.1

You can find the following improvements in this release.

Critical stability updates

1. Fixed a bug in which the DB instance might be briefly unavailable due to the self-healing function of the underlying storage.

High priority stability updates

1. Fixed a bug that might cause the database engine to crash causing unavailability. This occurred if a newly established database connection encountered a resource exhaustion-related error during initialization after successful authentication.

Additional improvements and enhancements

1. Provided a fix for the `pg_hint_plan` extension that could lead the database engine to crash causing unavailability. The open source issue can be tracked at https://github.com/ossc-db/pg_hint_plan/pull/45.
2. Fixed a bug where SQL of the form `ALTER FUNCTION ... OWNER TO ...` incorrectly reported `ERROR: improper qualified name (too many dotted names)`.
3. Improved the performance of `GIN` index vacuum via prefetching.
4. Fixed a bug in open source PostgreSQL that could lead to a database engine crash causing unavailability. This occurred during parallel B-Tree index scans. This issue has been reported to the PostgreSQL community.
5. Improved the performance of in-memory B-Tree index scans.
6. Additional general improvements to the stability and availability of Aurora PostgreSQL.

Aurora PostgreSQL 2.4.0

You can find the following new features and improvements in this engine version.

New features

1. Support for exporting data to Amazon S3. For more information, see Exporting data from an Aurora PostgreSQL DB cluster to Amazon S3 in the *Amazon Aurora User Guide*.

2. Support for Amazon Aurora Machine Learning. For more information, see Using machine learning (ML) with Aurora PostgreSQL in the *Amazon Aurora User Guide*.
3. SQL processing enhancements include:
   - Optimizations for `NOT IN` with the `apg_enable_not_in_transform` parameter.
   - Semi-join filter pushdown enhancements for hash joins with the `apg_enable_semijoin_push_down` parameter.
   - Optimizations for redundant inner join removal with the `apg_enable_remove_redundant_inner_joins` parameter.
   - Improved ANSI compatibility options with the `ansi_constraint_trigger_ordering`, `ansi_force_foreign_key_checks` and `ansi_qualified_update_set_target` parameters.

   For more information, see Amazon Aurora PostgreSQL parameters in the *Amazon Aurora User Guide*.
4. New and updated PostgreSQL extensions include:
   - The new `aws_ml` extension. For more information, see Using machine learning (ML) with Aurora PostgreSQL in the *Amazon Aurora User Guide*.
   - The new `aws_s3` extension. For more information, see Exporting data from an Aurora PostgreSQL DB cluster to Amazon S3 in the *Amazon Aurora User Guide*.
   - Updates to the `apg_plan_mgmt` extension. For more information, see Managing query execution plans for Aurora PostgreSQL in the *Amazon Aurora User Guide*.

Critical stability updates

1. Fixed a bug related to creating B-tree indexes on temporary tables that in rare cases may result in longer recovery time, and impact availability.
2. Fixed a bug related to replication when Aurora PostgreSQL is acting as a physical replica of an RDS for PostgreSQL instance. In rare cases, this bug causes a log write failure that may result in longer recovery time, and impact availability.
3. Fixed a bug related to handling of reads with high I/O latency that in rare cases may result in longer recovery time, and impact availability.

High priority stability updates

1. Fixed a bug related to logical replication in which `wal` segments are not properly removed from storage. This can result in storage bloat. To monitor this, view the `TransactionLogDiskUsage` parameter.
2. Fixed multiple bugs, which cause Aurora to crash during prefetch operations on Btree indexes.
3. Fixed a bug in which an Aurora restart may timeout when logical replication is used.
4. Enhanced the validation checks performed on data blocks in the buffer cache. This improves Aurora's detection of inconsistency.

Additional improvements and enhancements

1. The query plan management extension `apg_plan_mgmt` has an improved algorithm for managing plan generation for highly partitioned tables.
2. Reduced startup time on instances with large caches via improvements in the buffer cache recovery algorithm.
3. Improved the performance of the read-node-apply process under high transaction rate workloads by using changes to PostgreSQL `LWLock` prioritization. These changes prevent starvation of the read-node-apply process while the PostgreSQL `ProcArray` is under heavy contention.
4. Improved handling of batch reads during vacuum, table scans, and index scans. This results in greater throughput and lower CPU consumption.
5. Fixed a bug in which a read node may crash during the replay of a PostgreSQL `SLRU`-truncate operation.
6. Fixed a bug where in rare cases, database writes may stall following an error returned by one of the six copies of an Aurora log record.
7. Fixed a bug related to logical replication where an individual transaction larger than 1 GB in size may result in an engine crash.
8. Fixed a memory leak on read nodes when cluster cache management is enabled.
9. Fixed a bug in which importing an RDS for PostgreSQL snapshot might stop responding if the source snapshot contains a large number of unlogged relations.
10. Fixed a bug in which the Aurora storage daemon may crash under heavy I/O load.

11. Fixed a bug related to `hot_standby_feedback` for read nodes in which the read node may report the wrong transaction id epoch to the write node. This can cause the write node to ignore the `hot_standby_feedback` and invalidate snapshots on the read node.

12. Fixed a bug in which storage errors that occur during `CREATE DATABASE` statements are not properly handled. The bug left the resulting database inaccessible. The correct behavior is to fail the database creation and return the appropriate error to the user.

13. Improved handling of PostgreSQL snapshot overflow when a read node attempts to connect to a write node. Prior to this change, if the write node was in a snapshot overflow state, the read node was unable to join. A message appeared in the PostgreSQL log file in the form `DEBUG: recovery snapshot waiting for non-overflowed snapshot or until oldest active xid on standby is at least` *`xxxxxxx`* (now *`yyyyyyy`*). A snapshot overflow occurs when an individual transaction has created over 64 subtransactions.

14. Fixed a bug related to common table expressions in which an error is incorrectly raised when a NOT IN class exists in a CTE. The error is `CTE with NOT IN fails with ERROR: could not find CTE` *`CTE-Name`*.

15. Fixed a bug related to an incorrect `last_error_timestamp` value in the `aurora_replica_status` table.

16. Fixed a bug to avoid populating shared buffers with blocks belonging to temporary objects. These blocks correctly reside in PostgreSQL backend local buffers.

17. Improved the performance of vacuum cleanup on GIN indexes.

18. Fixed a bug where in rare cases Aurora may exhibit 100% CPU utilization while acting as a replica of an RDS for PostgreSQL instance even when the replication stream is idle.

19. Backported a change from PostgreSQL 11 which improves the cleanup of orphaned temporary tables. Without this change, it is possible that in rare cases orphaned temporary tables can lead to transaction ID wraparound. For more information, see this PostgreSQL community commit.

20. Fixed a bug where a Writer instance may accept replication registration requests from Reader instances while having an uninitialized startup process.

21. Changed the following extensions:

    - Updated `pg_hint_plan` to version 1.3.3.
    - Added `plprofiler` version 4.1.

PostgreSQL 10.7, Aurora PostgreSQL 2.3 (Deprecated)

> **Note**
>
> The PostgreSQL engine version 10.7 with the Aurora PostgreSQL 2.3 is no longer supported. To upgrade, see Upgrading the PostgreSQL DB engine for Aurora PostgreSQL in the *Amazon Aurora User Guide*.

This release of Aurora PostgreSQL is compatible with PostgreSQL 10.7. For more information about the improvements in PostgreSQL 10.7, see PostgreSQL release 10.7.

Releases and patches

- Aurora PostgreSQL 2.3.5
- Aurora PostgreSQL 2.3.3
- Aurora PostgreSQL 2.3.1
- Aurora PostgreSQL 2.3.0

Aurora PostgreSQL 2.3.5

You can find the following improvements in this release.

Improvements

1. Fixed a bug that could cause DB instance restarts.
2. Fixed a bug that could cause a crash when the PostgreSQL backend exits while using logical replication.
3. Fixed a bug that could cause a restart when reads occurred during failovers.
4. Fixed a bug with the `wal2json` module for logical replication.
5. Fixed a bug that could result in inconsistent metadata.

Aurora PostgreSQL 2.3.3

You can find the following improvements in this release.

Improvements

1. Provided a backport fix for the PostgreSQL community security issue CVE-2019-10130.
2. Provided a backport fix for the PostgreSQL community security issue CVE-2019-10164.
3. Fixed a bug in which data activity streaming could consume excessive CPU time.
4. Fixed a bug in which parallel threads scanning a B-tree index might stop responding following a disk read.
5. Fixed a bug where use of the `not in` predicate against a common table expression (CTE) could return the following error: "ERROR: bad levelsup for CTE".
6. Fixed a bug in which the read node replay process might stop responding while applying a modification to a generalized search tree (GiST) index.
7. Fixed a bug in which visibility map pages could contain incorrect freeze bits following a failover to a read node.
8. Optimized log traffic between the write node and read nodes during index maintenance.
9. Fixed a bug in which queries on read nodes may crash while performing a B-tree index scan.
10. Fixed a bug in which a query that has been optimized for redundant inner join removal could crash.
11. The function `aurora_stat_memctx_usage` now reports the number of instances of a given context name.
12. Fixed a bug in which the function `aurora_stat_memctx_usage` reported incorrect results.
13. Fixed a bug in which the read node replay process could wait to stop conflicting queries beyond the configured `max_standby_streaming_delay` value.
14. Additional information is now logged on read nodes when active connections conflict with the relay process.
15. Provided a backport fix for the PostgreSQL community bug #15677, where a crash could occur while deleting from a partitioned table.

Aurora PostgreSQL 2.3.1

You can find the following improvements in this release.

Improvements

1. Fixed multiple bugs related to I/O prefetching that caused engine crashes.

Aurora PostgreSQL 2.3.0

You can find the following improvements in this release.

New features

1. Aurora PostgreSQL now performs I/O prefetching while scanning B-tree indexes. This results in significantly improved performance for B-tree scans over uncached data.

Improvements

1. Fixed a bug in which read nodes may fail with the error "too many LWLocks taken".
2. Addressed numerous issues that caused read nodes to fail to startup while the cluster is under heavy write workload.
3. Fixed a bug in which usage of the `aurora_stat_memctx_usage()` function could lead to a crash.
4. Improved the cache replacement strategy used by table scans to minimize thrashing of the buffer cache.

PostgreSQL 10.6, Aurora PostgreSQL 2.2 (Deprecated)

> **Note**
>
> The PostgreSQL engine version 10.6 with the Aurora PostgreSQL 2.2 is no longer supported. To upgrade, see Upgrading the PostgreSQL DB engine for Aurora PostgreSQL in the *Amazon Aurora User Guide*.

This release of Aurora PostgreSQL is compatible with PostgreSQL 10.6. For more information about the improvements in PostgreSQL 10.6, see PostgreSQL release 10.6.

Releases and patches

- Aurora PostgreSQL 2.2.1
- Aurora PostgreSQL 2.2.0

Aurora PostgreSQL 2.2.1

You can find the following improvements in this release.

Improvements

1. Improved stability of logical replication.
2. Fixed a bug which could cause an error running queries. The message reported was of the form "CLOG segment 123 does not exist: No such file or directory".
3. Increased the supported size of IAM passwords to 8KB.
4. Improved consistency of performance under high throughput write workloads.
5. Fixed a bug which could cause a read replica to crash during a restart.
6. Fixed a bug which could cause an error running queries. The message reported was of the form "SQL ERROR: Attempting to read past EOF of relation".
7. Fixed a bug which could cause an increase in memory usage after a restart.
8. Fixed a bug which could cause a transaction with a large number of subtransactions to fail.
9. Merged a patch from community PostgreSQL which addresses potential failures when using GIN indexes. For more information, see https://git.postgresql.org/gitweb/?p=postgresql.git;a=commit;h=f9e66f2fbbb49a493045c8d8086a9b15d95b8f18.
10. Fixed a bug which could cause a snapshot import from RDS for PostgreSQL to fail.

Aurora PostgreSQL 2.2.0

You can find the following improvements in this release.

New features

1. Added the restricted password management feature. Restricted password management enables you to restrict who can manage user passwords and password expiration changes by using the parameter `rds.restrict_password_commands` and the role `rds_password`. For more information, see Restricting password management in the *Amazon Aurora User Guide*.

PostgreSQL 10.5, Aurora PostgreSQL 2.1 (Deprecated)

> **Note**
>
> The PostgreSQL engine version 10.5 with the Aurora PostgreSQL 2.1 is no longer supported. To upgrade, see Upgrading the PostgreSQL DB engine for Aurora PostgreSQL in the *Amazon Aurora User Guide*.

This release of Aurora PostgreSQL is compatible with PostgreSQL 10.5. For more information about the improvements in PostgreSQL 10.5, see PostgreSQL release 10.5.

Releases and patches

- Aurora PostgreSQL 2.1.1
- Aurora PostgreSQL 2.1.0

Aurora PostgreSQL 2.1.1

You can find the following improvements in this release.

Improvements

1. Fixed a bug which could cause an error running queries. The message reported was of the form "CLOG segment 123 does not exist: No such file or directory".
2. Increased the supported size of IAM passwords to 8KB.
3. Improved consistency of performance under high throughput write workloads.
4. Fixed a bug which could cause a read replica to crash during a restart.
5. Fixed a bug which could cause an error running queries. The message reported was of the form "SQL ERROR: Attempting to read past EOF of relation".
6. Fixed a bug which could cause an increase in memory usage after a restart.
7. Fixed a bug which could cause a transaction with a large number of subtransactions to fail.
8. Merged a patch from community PostgreSQL which addresses potential failures when using GIN indexes. For more information, see https://git.postgresql.org/gitweb/?p=postgresql.git;a=commit;h=f9e66f2fbbb49a493045c8d8086a9b15d95b8f18.
9. Fixed a bug which could cause a snapshot import from RDS for PostgreSQL to fail.

Aurora PostgreSQL 2.1.0

You can find the following improvements in this release.

New features

1. General availability of Aurora Query Plan Management, which enables customers to track and manage any or all query plans used by their applications, to control query optimizer plan selection, and to ensure high and stable applicationperformance. For more information, see Managing query execution plans for Aurora PostgreSQL in the *Amazon Aurora User Guide*.
2. Updated the `libprotobuf` extension to version 1.3.0. This is used by the `PostGIS` extension.
3. Updated the `pg_similarity` extension to version 1.0.
4. Updated the `log_fdw` extension to version 1.1.
5. Updated the `pg_hint_plan` extension to version 1.3.1.

Improvements

1. Network traffic between the writer and reader nodes is now compressed to reduce network utilization. This reduces the chance of read node unavailability due to network saturation.
2. Implemented a high performance, scalable subsystem for PostgreSQL subtransactions. This improves the performance of applications which make extensive use of savepoints and PL/pgSQL exception handlers.
3. The `rds_superuser` role can now set the following parameters on a per-session, database, or role level:
   - `log_duration`
   - `log_error_verbosity`
   - `log_executor_stats`
   - `log_lock_waits`
   - `log_min_duration_statement`
   - `log_min_error_statement`
   - `log_min_messages`
   - `log_parser_stats`
   - `log_planner_stats`
   - `log_replication_commands`

- `log_statement_stats`
- `log_temp_files`

4. Fixed a bug in which the SQL command "ALTER FUNCTION ... OWNER TO ..." might fail with error "improper qualified name (too many dotted names)".
5. Fixed a bug in which a crash could occur while committing a transaction with more than two million subtransactions.
6. Fixed a bug in community PostgreSQL code related to GIN indexes which can cause the Aurora Storage volume to become unavailable.
7. Fixed a bug in which an Aurora PostgreSQL replica of an RDS for PostgreSQL instance might fail to start, reporting error: "PANIC: could not locate a valid checkpoint record".
8. Fixed a bug in which passing an invalid parameter to the `aurora_stat_backend_waits` function could cause a crash.

Known issues

1. The `pageinspect` extension is not supported in Aurora PostgreSQL.

PostgreSQL 10.4, Aurora PostgreSQL 2.0 (Deprecated)

> **Note**
>
> The PostgreSQL engine version 10.4 with the Aurora PostgreSQL 2.0 is no longer supported. To upgrade, see Upgrading the PostgreSQL DB engine for Aurora PostgreSQL in the *Amazon Aurora User Guide*.

This release of Aurora PostgreSQL is compatible with PostgreSQL 10.4. For more information about the improvements in PostgreSQL 10.4, see PostgreSQL release 10.4.

Releases and patches

- Aurora PostgreSQL 2.0.1
- Aurora PostgreSQL 2.0.0

Aurora PostgreSQL 2.0.1

You can find the following improvements in this release.

Improvements

1. Fixed a bug which could cause an error running queries. The message reported was of the form "CLOG segment 123 does not exist: No such file or directory".
2. Increased the supported size of IAM passwords to 8KB.
3. Improved consistency of performance under high throughput write workloads.
4. Fixed a bug which could cause a read replica to crash during a restart.
5. Fixed a bug which could cause an error running queries. The message reported was of the form "SQL ERROR: Attempting to read past EOF of relation".
6. Fixed a bug which could cause an increase in memory usage after a restart.
7. Fixed a bug which could cause a transaction with a large number of subtransactions to fail.
8. Merged a patch from community PostgreSQL which addresses potential failures when using GIN indexes. For more information, see https://git.postgresql.org/gitweb/?p=postgresql.git;a=commit;h=f9e66f2fbbb49a493045c8d8086a9b15d95b8f18.
9. Fixed a bug which could cause a snapshot import from RDS for PostgreSQL to fail.

Aurora PostgreSQL 2.0.0

You can find the following improvements in this release.

Improvements

1. This release contains all fixes, features, and improvements present in PostgreSQL 9.6.9, Aurora PostgreSQL 1.3 (Deprecated).
2. The temporary file size limitation is user-configurable. You require the **rds_superuser** role to modify the `temp_file_limit` parameter.
3. Upgraded the `GDAL` library, which is used by the `PostGIS` extension.
4. Updated the `ip4r` extension to version 2.1.1.
5. Updated the `pg_repack` extension to version 1.4.3.
6. Updated the `plv8` extension to version 2.1.2.

7. Parallel queries – When you create a new Aurora PostgreSQL version 2.0 instance, parallel queries are enabled for the `default.postgres10` parameter group. The parameter `max_parallel_workers_per_gather` is set to 2 by default, but you can modify it to support your specific workload requirements.
8. Fixed a bug in which read nodes may crash following a specific type of free space change from the write node.

PostgreSQL 9.6 versions (Deprecated)

Version updates

- PostgreSQL 9.6.22, Aurora PostgreSQL 1.11 (Deprecated)
- PostgreSQL 9.6.21, Aurora PostgreSQL 1.10 (Deprecated)
- PostgreSQL 9.6.19, Aurora PostgreSQL 1.9 (Deprecated)
- PostgreSQL 9.6.18, Aurora PostgreSQL 1.8 (Deprecated)
- PostgreSQL 9.6.17, Aurora PostgreSQL 1.7 (Deprecated)
- PostgreSQL 9.6.16, Aurora PostgreSQL 1.6 (Deprecated)
- PostgreSQL 9.6.12, Aurora PostgreSQL 1.5 (Deprecated)
- PostgreSQL 9.6.11, Aurora PostgreSQL 1.4 (Deprecated)
- PostgreSQL 9.6.9, Aurora PostgreSQL 1.3 (Deprecated)
- PostgreSQL 9.6.8, Aurora PostgreSQL 1.2 (Deprecated)
- PostgreSQL 9.6.6 Aurora PostgreSQL 1.1 (Deprecated)
- PostgreSQL 9.6.3, Aurora PostgreSQL 1.0 (Deprecated)

PostgreSQL 9.6.22, Aurora PostgreSQL 1.11 (Deprecated)

Note

The PostgreSQL engine version 9.6.22 and Aurora PostgreSQL 1.10 are no longer supported. To upgrade, see Upgrading the PostgreSQL DB engine for Aurora PostgreSQL in the *Amazon Aurora User Guide*.

This release of Aurora PostgreSQL is compatible with PostgreSQL 9.6.22. For more information about the improvements in PostgreSQL 9.6.22, see PostgreSQL release 9.6.22.

Releases and patches

- Aurora PostgreSQL 1.11.1
- Aurora PostgreSQL 1.11

Aurora PostgreSQL 1.11.1

High priority stability updates

- Fixed an issue where queries may become unresponsive due to I/O resource exhaustion triggered by prefetch.

Additional improvements and stability updates

- Fixed multiple issues in the Aurora storage daemon that could lead to brief periods of unavailability when specific network configurations are used.

Aurora PostgreSQL 1.11

High priority stability enhancements

1. Fixed an issue where creating a database from an existing template database with tablespace resulted in an error with the message `ERROR: could not open file pg_tblspc/...: No such file or directory`.
2. Fixed an issue where, in rare cases, an Aurora replica may be unable to start when a large number of PostgreSQL subtransactions (i.e. SQL savepoints) have been used.
3. Fixed an issue where, in rare circumstances, read results may be inconsistent for repeated read requests on replica nodes.

Additional improvements and enhancements

1. Upgraded OpenSSL to 1.1.1k.
2. Reduced CPU usage and memory consumption of the WAL apply process on Aurora replicas for some workloads.

3. Improve safety checks in the write path to detect incorrect writes to metadata.
4. Fixed an issue where a duplicate file entry can prevent the Aurora PostgreSQL engine from starting up.
5. Fixed an issue that could cause temporary unavailability under heavy workloads.
6. Added back ability to use a leading forward slash in the S3 path during S3 import.
7. Updated the `PostGIS` extension to version 2.4.7.
8. Updated the `orafce` extension to version 3.16.

PostgreSQL 9.6.21, Aurora PostgreSQL 1.10 (Deprecated)

> **Note**
>
> The PostgreSQL engine version 9.6.21 and Aurora PostgreSQL 1.10 are no longer supported. To upgrade, see Upgrading the PostgreSQL DB engine for Aurora PostgreSQL in the *Amazon Aurora User Guide*.

This release of Aurora PostgreSQL is compatible with PostgreSQL 9.6.21. For more information about the improvements in PostgreSQL 9.6.21, see PostgreSQL release 9.6.21.

Aurora PostgreSQL 1.10.0

High priority stability enhancements

1. Fixed a bug where in rare cases a reader had inconsistent results when it restarted while a transaction with more than 64 subtransactions was being processed.
2. Backported fixes for the following PostgreSQL community security issues:
   - CVE-2021-32027
   - CVE-2021-32028
   - CVE-2021-32029

Additional improvements and enhancements

1. Fixed a bug where the database could not be started when there were many relations in memory-constrained environments.

2. Fixed a bug in the `apg_plan_mgmt` extension that could cause brief periods of unavailability due to an internal buffer overflow.
3. Fixed a bug where the database engine would attempt to create shared memory segments larger than the instance total memory and fail repeatedly. For example, attempts to create 128 GiB shared buffers on a db.r5.large instance would fail. With this change, requests for total shared memory allocations larger than the instance memory allow setting the instance to incompatible parameters.
4. Added logic to clean up unnecessary `pg_wal` temporary files on a database startup.
5. Fixed a bug in Aurora PostgreSQL 9.6 that sometimes prevented read/write nodes from starting up when inbound replication is used.
6. Fixed a bug that could cause brief periods of unavailability due to running out of memory when creating the `PostGIS` extension with `pgAudit` enabled.
7. Added btree page checks to detect tuple metadata inconsistency.

PostgreSQL 9.6.19, Aurora PostgreSQL 1.9 (Deprecated)

> **Note**
>
> The PostgreSQL engine version 9.6.19 and Aurora PostgreSQL 1.9 are no longer supported. To upgrade, see Upgrading the PostgreSQL DB engine for Aurora PostgreSQL in the *Amazon Aurora User Guide*.

This release of Aurora PostgreSQL is compatible with PostgreSQL 9.6.19. For more information about the improvements in PostgreSQL 9.6.19, see PostgreSQL release 9.6.19.

Releases and patches

- Aurora PostgreSQL 1.9.2
- Aurora PostgreSQL 1.9.1
- Aurora PostgreSQL 1.9.0

Aurora PostgreSQL 1.9.2

High priority stability enhancements

1. Fixed a bug where a reader node might render an extra or missing row if the reader restarted while the writer node is processing a long transaction with more than 64 subtransactions.

Additional improvements and enhancements

1. Fixed a bug where a large S3 import with thousands of clients can cause one or more of the import clients to stop responding.

Aurora PostgreSQL 1.9.1

Critical stability enhancements

1. Fixed a bug that caused a read replica to unsuccessfully restart repeatedly in rare cases.

Additional improvements and enhancements

1. Fixed a bug that when under heavy load, snapshot import, COPY import, or S3 import stopped responding in rare cases.
2. Fixed a bug where a read replica might not join the cluster when the writer was very busy with a write-intensive workload.

Aurora PostgreSQL 1.9.0

Critical stability enhancements

- None

High priority stability enhancements

1. Backported fixes for the PostgreSQL community security issues CVE-2020-25694, CVE-2020-25695, and CVE-2020-25696.
2. Fixed a bug in Aurora PostgreSQL replication that might result in the following error message: ERROR: `MultiXactId` nnnn has not been created yet -- apparent wraparound

Additional improvements and enhancements

1. Aurora PostgreSQL no longer falls behind on a read node when the backend is blocked writing to the database client.
2. Fixed a bug that in rare cases caused a brief period of unavailability on a read replica when the storage volume grew.
3. Fixed a bug when creating a database that could return the following error: ERROR: could not create directory on local disk
4. Fixed a bug in the `GiST` index that could result in an out of memory condition after promoting an Aurora read replica.
5. Fixed a bug related to replication when Aurora PostgreSQL is acting as a physical replica of an RDS for PostgreSQL instance that uses `GiST` indexes. In rare cases, this bug caused a brief period of unavailability after promoting the Aurora cluster.

PostgreSQL 9.6.18, Aurora PostgreSQL 1.8 (Deprecated)

> **Note**
>
> The PostgreSQL engine version 9.6.18 and Aurora PostgreSQL 1.8 are no longer supported. To upgrade, see Upgrading the PostgreSQL DB engine for Aurora PostgreSQL in the *Amazon Aurora User Guide*.

This release of Aurora PostgreSQL is compatible with PostgreSQL 9.6.18. For more information about the improvements in PostgreSQL 9.6.18, see PostgreSQL release 9.6.18.

Releases and patches

- Aurora PostgreSQL release 1.8.2
- Aurora PostgreSQL 1.8.0

There is no version 1.8.1.

Aurora PostgreSQL release 1.8.2

Critical stability enhancements

1. None

High priority stability enhancements

1. Fixed a bug in Aurora PostgreSQL replication that could result in the error message ERROR: `MultiXactId` nnnn has not been created yet -- apparent wraparound.
2. Backported fixes for the following PostgreSQL community security issues:
   - CVE-2020-25694
   - CVE-2020-25695
   - CVE-2020-25696

Additional improvements and enhancements

1. Aurora PostgreSQL no longer falls behind on a read node when the backend is blocked writing to the database client.
2. Fixed a bug where a `DROP DATABASE` statement didn't remove any relation files.
3. Fixed a small memory leak in a b-tree index that could lead to an out of memory condition.
4. Fixed a bug in the `aurora_replica_status()` function where the `server_id` field was sometimes truncated.
5. Fixed a bug related to replication when Aurora PostgreSQL is acting as a physical replica of an RDS for PostgreSQL instance that uses GiST indexes. In rare cases, this bug caused a brief period of unavailability after promoting the Aurora DB cluster.

Aurora PostgreSQL 1.8.0

You can find the following improvements in this release.

Critical stability enhancements

1. Fixed a bug related to heap page extend that in rare cases resulted in longer recovery time and impacted availability.

Additional improvements and enhancements

1. Fixed a bug where the Aurora replica crashed when workloads with heavy subtransactions are made on the writer instance.
2. Fixed a bug where the writer instance crashed due to a memory leak and the depletion of memory used to track active transactions.

3. Fixed a bug that lead to a crash due to improper initialization when there is no free memory available during PostgreSQL backend startup.
4. Fixed a crash during a BTree prefetch that occurred under certain conditions that depended on the shape and data contained in the index.
5. Fixed a bug where a SELECT query might incorrectly return the error Attempting to read past EOF of relation rrrr. blockno=bbb nblocks=nnn.
6. Fixed a bug where the database might be unavailable briefly due to error handling in database storage growth.

PostgreSQL 9.6.17, Aurora PostgreSQL 1.7 (Deprecated)

This release of Aurora PostgreSQL is compatible with PostgreSQL 9.6.17. For more information about the improvements in PostgreSQL 9.6.17, see PostgreSQL release 9.6.17.

Releases and patches

- Aurora PostgreSQL 1.7.7
- Aurora PostgreSQL 1.7.6
- Aurora PostgreSQL 1.7.3
- Aurora PostgreSQL 1.7.2
- Aurora PostgreSQL 1.7.1

Aurora PostgreSQL 1.7.7

You can find the following improvements in this release.

Critical stability enhancements

- None

High priority stability enhancements

1. Backported fixes for the following PostgreSQL community security issues:
   - CVE-2020-25694
   - CVE-2020-25695
   - CVE-2020-25696

Additional improvements and enhancements

- None

Aurora PostgreSQL 1.7.6

You can find the following improvements in this release.

Critical stability enhancements

- None

High priority stability enhancements

1. Fixed a bug in Aurora PostgreSQL replication that might result in the error message, ERROR: `MultiXactId` nnnn has not been created yet -- apparent wraparound.

Additional improvements and enhancements

1. Fixed a bug that in rare cases caused brief read replica unavailability when storage volume grew.
2. Fixed a bug in a b-tree index read optimization that might have caused a brief period of unavailability.
3. Fixed a bug in a GiST index that might result in an out-of-memory condition after promoting an Aurora Read Replica.

Aurora PostgreSQL 1.7.3

You can find the following improvements in this release.

Critical stability enhancements

- None

High priority stability enhancements

- None

Additional improvements and enhancements

1. Fixed a bug that might cause brief unavailability for heavy subtransaction workloads when multiple reader instances restart or rejoin the cluster.

Aurora PostgreSQL 1.7.2

You can find the following improvements in this release.

Critical stability enhancements

1. Fixed a bug related to heap page extend that in rare cases resulted in longer recovery time and impacted availability.

High Priority Stability Enhancements

None

Additional improvements and enhancements

1. Fixed a bug where the database might be unavailable briefly due to error handling in database storage growth.
2. Fixed a bug where a SELECT query might incorrectly return the error, Attempting to read past EOF of relation rrrr. blockno=bbb nblocks=nnn.
3. Fixed an issue with the internal metrics collector that could result in erratic CPU spikes on database instances.

Aurora PostgreSQL 1.7.1

You can find the following improvements in this release.

Critical stability enhancements

None.

High priority stability enhancements

1. Improved performance and availability of read instances when applying DROP TABLE and TRUNCATE TABLE operations.

2. Fixed a small but continuous memory leak in a diagnostic module that could lead to an out-of-memory condition on smaller DB instance types.
3. Fixed a bug in the `PostGIS` extension which could lead to a database restart. This has been reported to the PostGIS community as https://trac.osgeo.org/postgis/ticket/4646.
4. Fixed a bug where read requests might stop responding due to incorrect error handling in the storage engine.
5. Fixed a bug that fails for some queries and results in the message ERROR: found xmin xxxxxx from before relfrozenxid yyyyyyy. This could occur following the promotion of a read instance to a write instance.

Additional improvements and enhancements

1. Improved performance for queries that read many rows from storage.
2. Improved performance and availability of reader DB instances during heavy read workload.
3. Fixed a bug that resulted in the message ERROR: could not create file "base/xxxxxx/yyyyyyy" as a previous version still exists on disk: Success. Please contact AWS customer support. This can occur during object creation after PostgreSQL's 32-bit object identifier has wrapped around.
4. Fixed a bug in the `pg_hint_plan` extension where a multi-statement query could lead to a crash when `enable_hint_table` is enabled. This is tracked in the PostgreSQL community as https://github.com/ossc-db/pg_hint_plan/issues/25.
5. Changed the following extensions:
   - Updated `orafce` to version 3.8

PostgreSQL 9.6.16, Aurora PostgreSQL 1.6 (Deprecated)

This version of Aurora PostgreSQL is compatible with PostgreSQL 9.6.16. For more information about the improvements in release 9.6.16, see PostgreSQL release 9.6.16.

This release contains multiple critical stability enhancements. Amazon highly recommends upgrading your Aurora PostgreSQL clusters that use older PostgreSQL 9.6 engines to this release.

Patch versions

- Aurora PostgreSQL 1.6.4
- Aurora PostgreSQL 1.6.3
- Aurora PostgreSQL 1.6.2

- Aurora PostgreSQL 1.6.1
- Aurora PostgreSQL 1.6.0

Aurora PostgreSQL 1.6.4

You can find the following improvements in this release.

Critical stability enhancements

- None

High priority stability enhancements

1. Backported fixes for the following PostgreSQL community security issues:
   - CVE-2020-25694
   - CVE-2020-25695
   - CVE-2020-25696

Additional improvements and enhancements

- None

Aurora PostgreSQL 1.6.3

New features

1. Aurora PostgreSQL now supports the PostgreSQL vacuum_truncate storage parameter to manage vacuum truncation for specific tables. Set this storage parameter to false when creating or altering a table to prevent the VACUUM SQL command from truncating the table's trailing empty pages.

Critical stability enhancements

- None

High priority stability enhancements

1. Fixed a bug where reads from storage might stop responding due to incorrect error handling.

Additional improvements and enhancements

- None

Aurora PostgreSQL 1.6.2

You can find the following improvements in this engine update.

Critical stability enhancements

1. Fixed a bug in which a reader DB instance might temporarily use stale data. This could lead to wrong results such as too few or too many rows. This error is not persisted on storage, and will clear when the database page containing the row has been evicted from cache. This can happen when the primary DB instance enters a transaction snapshot overflow due to having more than 64 subtransactions in a single transaction. Applications susceptible to this bug include those that use SQL savepoints or PostgreSQL exception handlers with more than 64 subtransactions in the top transaction.

High priority stability enhancements

1. Fixed a bug that may cause a reader DB instance to crash causing unavailability while attempting to the join the DB cluster. This can happen in some cases when the primary DB instance has a transaction snapshot overflow due to a high number of subtransactions. In this situation the reader DB instance will be unable to join until the snapshot overflow has cleared.

Additional improvements and enhancements

1. Fixed a bug that prevented Performance Insights from determining the query ID of a running statement.

Aurora PostgreSQL 1.6.1

You can find the following improvements in this engine update.

Critical stability enhancements

1. None

High priority stability enhancements

1. Fixed a bug that might cause the database engine to crash causing unavailability. This occurred if a newly established database connection encountered a resource exhaustion-related error during initialization after successful authentication.

Additional improvements and enhancements

1. Provided general improvements to the stability and availability of Aurora PostgreSQL.

Aurora PostgreSQL 1.6.0

You can find the following new features and improvements in this engine version.

New features

1. Updates to the `apg_plan_mgmt` extension. For more information, see Managing query execution plans for Aurora PostgreSQL in the *Amazon Aurora User Guide*.

Critical stability enhancements

1. Fixed a bug related to creating B-tree indexes on temporary tables that in rare cases may result in longer recovery time, and impact availability.
2. Fixed a bug related to replication when Aurora PostgreSQL is acting as a physical replica of an RDS for PostgreSQL instance. In rare cases, this bug causes a log write failure that may result in longer recovery time, and impact availability.
3. Fixed a bug related to handling of reads with high I/O latency that in rare cases may result in longer recovery time, and impact availability.

High priority stability enhancements

1. Fixed multiple bugs, which cause Aurora to crash during prefetch operations on Btree indexes.

2. Enhanced the validation checks performed on data blocks in the buffer cache. This improves Aurora's detection of inconsistency.

Additional improvements and enhancements

1. The query plan management extension `apg_plan_mgmt` has an improved algorithm for managing plan generation for highly partitioned tables.
2. Reduced startup time on instances with large caches via improvements in the buffer cache recovery algorithm.
3. Improved the performance of the read-node-apply process under high transaction rate workloads by using changes to PostgreSQL `LWLock` prioritization. These changes prevent starvation of the read-node-apply process while the PostgreSQL `ProcArray` is under heavy contention.
4. Fixed a bug in which a read node may crash during the replay of a PostgreSQL `SLRU`-truncate operation.
5. Fixed a bug where in rare cases, database writes might stall following an error returned by one of the six copies of an Aurora log record.
6. Fixed a memory leak on read nodes when cluster cache management is enabled.
7. Fixed a bug in which importing an RDS for PostgreSQL snapshot might stop responding if the source snapshot contains a large number of unlogged relations.
8. Fixed a bug related to `hot_standby_feedback` for read nodes in which the read node may report the wrong transaction id epoch to the write node. This can cause the write node to ignore the `hot_standby_feedback` and invalidate snapshots on the read node.
9. Fixed a bug in which storage errors that occur during `CREATE DATABASE` statements are not properly handled. The bug left the resulting database inaccessible. The correct behavior is to fail the database creation and return the appropriate error to the user.
10. Improved handling of PostgreSQL snapshot overflow when a read node attempts to connect to a write node. Prior to this change, if the write node was in a snapshot overflow state, the read node was unable to join. A message appear in the PostgreSQL log file in the form `DEBUG: recovery snapshot waiting for non-overflowed snapshot or until oldest active xid on standby is at least` *`xxxxxxx`* (now *`yyyyyyy`*). A snapshot overflow occurs when an individual transaction has created over 64 subtransactions.

11 Fixed a bug related to common table expressions in which an error is incorrectly raised when a NOT IN class exists in a CTE. The error is `CTE with NOT IN fails with ERROR: could not find CTE` *`CTE-Name`*.

12 Fixed a bug related to an incorrect `last_error_timestamp` value in the `aurora_replica_status` table.

13 Fixed a bug to avoid populating shared buffers with blocks belonging to temporary objects. These blocks correctly reside in PostgreSQL backend local buffers.

14 Fixed a bug where in rare cases Aurora may exhibit 100% CPU utilization while acting as a replica of an RDS for PostgreSQL instance even when the replication stream is idle.

15 Backported a change from PostgreSQL 11 which improves the cleanup of orphaned temporary tables. Without this change, it is possible that in rare cases orphaned temporary tables can to lead to transaction ID wraparound. For more information, see this PostgreSQL community commit.

16 Fixed a bug where a Writer instance may accept replication registration requests from Reader instances while having an uninitialized startup process.

17 Changed the following extensions:

- Updated `pg_hint_plan` to version 1.2.5.

PostgreSQL 9.6.12, Aurora PostgreSQL 1.5 (Deprecated)

> **Note**
>
> The PostgreSQL engine version 9.6.12 with the Aurora PostgreSQL 1.5 is no longer supported. To upgrade, see Upgrading the PostgreSQL DB engine for Aurora PostgreSQL in the *Amazon Aurora User Guide*.

This release of Aurora PostgreSQL is compatible with PostgreSQL 9.6.12. For more information about the improvements in PostgreSQL 9.6.12, see PostgreSQL release 9.6.12.

Releases and patches

- Aurora PostgreSQL 1.5.3
- Aurora PostgreSQL 1.5.2
- Aurora PostgreSQL 1.5.1

- Aurora PostgreSQL 1.5.0

Aurora PostgreSQL 1.5.3

You can find the following improvements in this release.

Improvements

1. Fixed a bug that could cause DB instance restarts.
2. Fixed a bug that could cause a restart when reads occurred during failovers.
3. Fixed a bug that could result in inconsistent metadata.

Aurora PostgreSQL 1.5.2

You can find the following improvements in this release.

Improvements

1. Provided a backport fix for the PostgreSQL community security issue CVE-2019-10130.
2. Fixed a bug in which the read node replay process might stop responding while applying a modification to a generalized search tree (GiST) index.
3. Fixed a bug in which visibility map pages may contain incorrect freeze bits following a failover to a read node.
4. Fixed a bug in which the error "relation `relation-name` does not exist" is incorrectly reported.
5. Optimized log traffic between the write node and read nodes during index maintenance.
6. Fixed a bug in which queries on read nodes may crash while performing a B-tree index scan.
7. The function `aurora_stat_memctx_usage` now reports the number of instances of a given context name.
8. Fixed a bug in which the function `aurora_stat_memctx_usage` reported incorrect results.
9. Fixed a bug in which the read node replay process may wait to stop conflicting queries beyond the configured `max_standby_streaming_delay`.
10. Additional information is now logged on read nodes when active connections conflict with the relay process.

Aurora PostgreSQL 1.5.1

You can find the following improvements in this release.

Improvements

1. Fixed multiple bugs related to I/O prefetching, which caused engine crashes.

Aurora PostgreSQL 1.5.0

You can find the following improvements in this release.

New features

1. Aurora PostgreSQL now performs I/O prefetching while scanning B-tree indexes. This results in significantly improved performance for B-tree scans over uncached data.

Improvements

1. Addressed numerous issues that caused read nodes to fail to startup while the cluster is under heavy write workload.
2. Fixed a bug in which usage of the `aurora_stat_memctx_usage()` function could lead to a crash.
3. Improved the cache replacement strategy used by table scans to minimize thrashing of the buffer cache.

PostgreSQL 9.6.11, Aurora PostgreSQL 1.4 (Deprecated)

> **Note**
>
> The PostgreSQL engine version 9.6.11 with the Aurora PostgreSQL 1.4 is no longer supported. To upgrade, see Upgrading the PostgreSQL DB engine for Aurora PostgreSQL in the *Amazon Aurora User Guide*.

This release of Aurora PostgreSQL is compatible with PostgreSQL 9.6.11. For more information about the improvements in PostgreSQL 9.6.11, see PostgreSQL release 9.6.11.

You can find the following improvements in this release.

New features

1. Support is added for the `pg_similarity` extension version 1.0.
2. Aurora PostgreSQL now supports the PostgreSQL vacuum_truncate storage parameter to manage vacuum truncation for specific tables. Set this storage parameter to false when creating or altering a table to prevent the VACUUM SQL command from truncating the table's trailing empty pages.

Improvements

1. This release contains all fixes, features, and improvements present in PostgreSQL 9.6.9, Aurora PostgreSQL 1.3 (Deprecated).
2. Network traffic between the writer and reader nodes is now compressed to reduce network utilization. This reduces the chance of read node unavailability due to network saturation.
3. Performance of subtransactions has improved under high concurrency workloads.
4. An update for the `pg_hint_plan` extension to version 1.2.3.
5. Fixed an issue where on a busy system, a commit with millions of subtransactions (and sometimes with commit timestamps enabled) can cause Aurora to crash.
6. Fixed an issue where an `INSERT` statement with `VALUES` could fail with the message "Attempting to read past EOF of relation".
7. An upgrade of the `apg_plan_mgmt` extension to version 1.0.1. For details, see Version 1.0.1 of the Aurora PostgreSQL apg_plan_mgmt extension.

   The `apg_plan_mgmt` extension is used with query plan management. For more about how to install, upgrade, and use the `apg_plan_mgmt` extension, see Managing query execution plans for Aurora PostgreSQL in the *Amazon Aurora User Guide*.

PostgreSQL 9.6.9, Aurora PostgreSQL 1.3 (Deprecated)

Note

The PostgreSQL engine version 9.6.9 with the Aurora PostgreSQL 1.3 is no longer supported. To upgrade, see Upgrading the PostgreSQL DB engine for Aurora PostgreSQL in the *Amazon Aurora User Guide*.

This release of Aurora PostgreSQL is compatible with PostgreSQL 9.6.9. For more information about the improvements in PostgreSQL 9.6.9, see PostgreSQL release 9.6.9.

Releases and patches

- Aurora PostgreSQL 1.3.2
- Aurora PostgreSQL 1.3.0

Aurora PostgreSQL 1.3.2

You can find the following improvements in this release.

New features

1. Added the `ProcArrayGroupUpdate` wait event.

Improvements

1. Fixed a bug which could cause an error running queries. The message reported was of the form "CLOG segment 123 does not exist: No such file or directory".
2. Increased the supported size of IAM passwords to 8KB.
3. Improved consistency of performance under high throughput write workloads.
4. Fixed a bug which could cause a read replica to crash during a restart.
5. Fixed a bug which could cause an error running queries. The message reported was of the form "SQL ERROR: Attempting to read past EOF of relation".
6. Fixed a bug which could cause an increase in memory usage after a restart.
7. Fixed a bug which could cause a transaction with a large number of subtransactions to fail.

8. Merged a patch from community PostgreSQL which addresses potential failures when using GIN indexes. For more information, see https://git.postgresql.org/gitweb/?p=postgresql.git;a=commit;h=f9e66f2fbbb49a493045c8d8086a9b15d95b8f18.
9. Fixed a bug which could cause a snapshot import from RDS for PostgreSQL to fail.

Aurora PostgreSQL 1.3.0

You can find the following improvements in this release.

Improvements

1. This release contains all fixes, features, and improvements present in PostgreSQL 9.6.8, Aurora PostgreSQL 1.2 (Deprecated).
2. Updated the `GDAL` library, which is used by the `PostGIS` extension.
3. Updated the following PostgreSQL extensions:
   - `ip4r` updated to version 2.1.1.
   - `pgaudit` updated to version 1.1.1.
   - `pg_repack` updated to version 1.4.3.
   - `plv8` updated to version 2.1.2.
4. Fixed an issue in the monitoring system that could incorrectly cause a failover when local disk usage is high.
5. Fixed a bug in which Aurora PostgreSQL can repeatedly crash, reporting:

   ```
   PANIC: new_record_total_len (8201) must be less than BLCKSZ (8192), rmid (6), info (32)
   ```
6. Fixed a bug in which an Aurora PostgreSQL read node might be unable to rejoin a cluster due to recovery of a large buffer cache. This issue is unlikely to occur on instances other than **r4.16xlarge.**
7. Fixed a bug in which inserting into an empty GIN index leaf page imported from pre-9.4 engine versions can cause the Aurora storage volume to become unavailable.
8. Fixed a bug in which, in rare circumstances, a crash during transaction commit could result in the loss of `CommitTs` data for the committing transaction. The actual durability of the transaction was not impacted by this bug.
9. Fixed a bug in the `PostGIS` extension in which `PostGIS` can crash in the function `gserialized_gist_picksplit_2d()`.

10 Improved the stability of read-only nodes during heavy write traffic on instances smaller than **r4.8xl**. This specifically addresses a situation where the network bandwidth between the writer and the reader is constrained.

11 Fixed a bug in which an Aurora PostgreSQL instance acting as a replication target of an RDS for PostgreSQL instance crashed with the following error:

```
FATAL: could not open file "base/16411/680897_vm": No such file or
directory" during "xlog redo at 782/3122D540 for Storage/TRUNCATE"
```

12 Fixed a memory leak on read-only nodes in which the heap size for the "aurora wal replay process" will continue to grow. This is observable via Enhanced Monitoring.

13 Fixed a bug in which Aurora PostgreSQL can fail to start, with the following message reported in the PostgreSQL log:

```
FATAL: Storage initialization failed.
```

14 Fixed a performance limitation on heavy write workloads that caused waits on the `LWLock:buffer_content` and `IO:ControlFileSyncUpdate` events.

15 Fixed a bug in which read nodes could crash following a specific type of free space change from the write node.

PostgreSQL 9.6.8, Aurora PostgreSQL 1.2 (Deprecated)

> **Note**
>
> The PostgreSQL engine version 9.6.8 with the Aurora PostgreSQL 1.2 is no longer supported. To upgrade, see Upgrading the PostgreSQL DB engine for Aurora PostgreSQL in the *Amazon Aurora User Guide*.

For more information about PostgreSQL 9.6.8, see PostgreSQL release 9.6.8.

Releases and patches

- Aurora PostgreSQL 1.2.2
- Aurora PostgreSQL 1.2.0

Aurora PostgreSQL 1.2.2

You can find the following improvements in this release.

New features

1. Added the `ProcArrayGroupUpdate` wait event.

Improvements

1. Fixed a bug which could cause an error running queries. The message reported was of the form "CLOG segment 123 does not exist: No such file or directory".
2. Increased the supported size of IAM passwords to 8KB.
3. Improved consistency of performance under high throughput write workloads.
4. Fixed a bug which could cause a read replica to crash during a restart.
5. Fixed a bug which could cause an error running queries. The message reported was of the form "SQL ERROR: Attempting to read past EOF of relation".
6. Fixed a bug which could cause an increase in memory usage after a restart.
7. Fixed a bug which could cause a transaction with a large number of subtransactions to fail.
8. Merged a patch from community PostgreSQL which addresses potential failures when using GIN indexes. For more information, see https://git.postgresql.org/gitweb/?p=postgresql.git;a=commit;h=f9e66f2fbbb49a493045c8d8086a9b15d95b8f18.
9. Fixed a bug which could cause a snapshot import from RDS for PostgreSQL to fail.

Aurora PostgreSQL 1.2.0

You can find the following improvements in this release.

New features

1. Introduced the `aurora_stat_memctx_usage()` function. This function reports internal memory context usage for each PostgreSQL backend. You can use this function to help determine why certain backends are consuming large amounts of memory.

Improvements

1. This release contains all fixes, features, and improvements present in PostgreSQL 9.6.6 Aurora PostgreSQL 1.1 (Deprecated).
2. Updates the following PostgreSQL extensions:
   - `pg_hint_plan` updated to version 1.2.2
   - `plv8` updated to version 2.1.0
3. Improves efficiency of traffic between writer and reader nodes.
4. Improves connection establishment performance.
5. Improve the diagnostic data provided in the PostgreSQL error log when an out-of-memory error is encountered.
6. Multiple fixes to improve the reliability and performance of snapshot import from Amazon RDS for PostgreSQL to Aurora PostgreSQL-Compatible Edition.
7. Multiple fixes to improve the reliability and performance of Aurora PostgreSQL read nodes.
8. Fixes a bug in which an otherwise idle instance can generate unnecessary read traffic on an Aurora storage volume.
9. Fixes a bug in which duplicate sequence values can be encountered during insert. The problem only occurs when migrating a snapshot from RDS for PostgreSQL to Aurora PostgreSQL. The fix prevents the problem from being introduced when performing the migration. Instances migrated before this release can still encounter duplicate key errors.
10. Fixes a bug in which an RDS for PostgreSQL instance migrated to Aurora PostgreSQL using replication can run out of memory doing insert/update of GIST indexes, or cause other issues with GIST indexes.
11. Fixes a bug in which vacuum can fail to update the corresponding `pg_database.datfrozenxid` value for a database.
12. Fixes a bug in which a crash while creating a new MultiXact (contended row level lock) can cause Aurora PostgreSQL to stop responding indefinitely on the first access to the same relation after the engine restarts.
13. Fixes a bug in which a PostgreSQL backend can't be terminated or canceled while invoking an `fdw` call.
14. Fixes a bug in which one vCPU is fully utilized at all times by the Aurora storage daemon. This issue is especially noticeable on smaller instance classes, such as r4.large, where it can lead to 25–50 percent CPU usage when idle.
15. Fixes a bug in which an Aurora PostgreSQL writer node can fail over spuriously.

16 Fixes a bug in which, in a rare scenario, an Aurora PostgreSQL read node can report:

"FATAL: lock buffer_io is not held"

17 Fixes a bug in which stale relcache entries can halt vacuuming of relations and push the system close to transaction ID wraparound. The fix is a port of a PostgreSQL community patch scheduled to be released in a future minor version.

18 Fixes a bug in which a failure while extending a relation can cause Aurora to crash while scanning the partially extended relation.

PostgreSQL 9.6.6 Aurora PostgreSQL 1.1 (Deprecated)

> **Note**
>
> The PostgreSQL engine version 9.6.6 with the Aurora PostgreSQL 1.1 is no longer supported. To upgrade, see Upgrading the PostgreSQL DB engine for Aurora PostgreSQL in the *Amazon Aurora User Guide*.

For more information about PostgreSQL 9.6.6 see, PostgreSQL release 9.6.6.

You can find the following improvements in this engine update:

New features

1. Introduced the `aurora_stat_utils` extension. This extension includes two functions:
   - aurora_wait_report() function for wait event monitoring
   - aurora_log_report() for log record write monitoring
2. Added support for the following extensions:
   - orafce 3.6.1
   - pgrouting 2.4.2
   - postgresql-hll 2.10.2
   - prefix 1.2.6

Improvements

1. This release contains all fixes, features, and improvements present in Aurora PostgreSQL 1.0.11

2. Updates for the following PostgreSQL extensions:
   - `PostGIS` extension updated to version 2.3.4
   - `geos` library updated to version 3.6.2
   - `pg_repack` updated to version 1.4.2
3. Access to the `pg_statistic` relation enabled.
4. Disabled the 'effective_io_concurrency' guc parameter, as it does not apply to Aurora storage.
5. Changed the 'hot_standby_feedback' guc parameter to not-modifiable and set the value to '1'.
6. Improved heap page read performance during a vacuum operation.
7. Improved performance of snapshot conflict resolution on read nodes.
8. Improved performance of transaction snapshot acquisition on read nodes.
9. Improved write performance for GIN meta page updates.
10. Improved buffer cache recovery performance during startup.
11. Fixes a bug that caused a database engine crash at startup while recovering prepared transactions.
12. Fixes a bug that could result in the inability to start a read node when there are a large number of prepared transactions.
13. Fixes a bug that could cause a read node to report:

    ERROR: could not access status of transaction 6080077

    DETAIL:* *Could not open file "pg_subtrans/005C": No such file or directory.
14. Fixes a bug that could cause the error below when replicating from RDS PostgreSQL to Aurora PostgreSQL:

    FATAL: lock buffer_content is not held

    CONTEXT: xlog redo at 46E/F1330870 for Storage/TRUNCATE: base/13322/8058750 to 0 blocks flags 7
15. Fixes a bug that could cause Aurora PostgreSQL to stop responding while replaying a multixact WAL record when replicating from RDS for PostgreSQL to Aurora PostgreSQL.
16. Multiple improvements to the reliability of importing snapshots from RDS PostgreSQL to Aurora PostgreSQL.

PostgreSQL 9.6.3, Aurora PostgreSQL 1.0 (Deprecated)

> **Note**
>
> The PostgreSQL engine version 9.6.3 with the Aurora PostgreSQL 1.0 is no longer supported. To upgrade, see Upgrading the PostgreSQL DB engine for Aurora PostgreSQL in the *Amazon Aurora User Guide*.

For more information about PostgreSQL 9.6.3 see, PostgreSQL release 9.6.3.

This version includes the following Releases:

Releases and patches

- Aurora PostgreSQL 1.0.11
- Aurora PostgreSQL 1.0.10
- Aurora PostgreSQL 1.0.9
- Aurora PostgreSQL 1.0.8
- Aurora PostgreSQL 1.0.7

Aurora PostgreSQL 1.0.11

You can find the following improvements in this engine update:

1. Fixes an issue with parallel query processing that can lead to incorrect results.
2. Fixes an issue with visibility map handling during replication from Amazon RDS for PostgreSQL that can cause the Aurora storage volume to become unavailable.
3. Corrects the pg-repack extension.
4. Implements improvements to maintain fresh nodes.
5. Fixes issues that can lead to an engine crash.

Aurora PostgreSQL 1.0.10

This update includes a new feature. You can now replicate an Amazon RDS PostgreSQL DB instance to Aurora PostgreSQL. For more information, see Replication with Amazon Aurora PostgreSQL in the *Amazon Aurora User Guide*.

You can find the following improvements in this engine update:

1. Adds error logging when a cache exists and a parameter change results in a mismatched buffer cache, storage format, or size.
2. Fixes an issue that causes an engine reboot if there is an incompatible parameter value for huge pages.
3. Improves handling of multiple truncate table statements during a replay of a write ahead log (WAL) on a read node.
4. Reduces static memory overhead to reduce out-of-memory errors.
5. Fixes an issue that can lead to out-of-memory errors while performing an insert with a GiST index.
6. Improves snapshot import from RDS for PostgreSQL, removing the requirement that a vacuum be performed on uninitialized pages.
7. Fixes an issue that causes prepared transactions to return to the previous state following an engine crash.
8. Implements improvements to prevent read nodes from becoming stale.
9. Implements improvements to reduce downtime with an engine restart.
10. Fixes issues that can cause an engine crash.

Aurora PostgreSQL 1.0.9

In this engine update, we fix an issue that can cause the Aurora storage volume to become unavailable when importing a snapshot from RDS for PostgreSQL that contained uninitialized pages.

Aurora PostgreSQL 1.0.8

You can find the following improvements in this engine update:

1. Fixes an issue that prevented the engine from starting if the `shared_preload_libraries` instance parameter contained `pg_hint_plan`.
2. Fixes the error "Attempt to fetch heap block XXX is beyond end of heap (YYY blocks)," which can occur during parallel scans.
3. Improves the effectiveness of prefetching on reads for a vacuum.

4. Fixes issues with snapshot import from RDS for PostgreSQL, which can fail if there are incompatible pg_internal.init files in the source snapshot.
5. Fixes an issue that can cause a read node to crash with the message "aurora wal replay process (PID XXX) was terminated by signal 11: Segmentation fault". This issue occurs when the reader applied a visibility map change for an uncached visibility map page.

Aurora PostgreSQL 1.0.7

This is the first generally available release of Amazon Aurora PostgreSQL-Compatible Edition.

Amazon Aurora PostgreSQL Limitless Database updates

Here you can find information about versions of Amazon Aurora PostgreSQL Limitless Database. Limitless Database provides automated horizontal scaling to process millions of write transactions per second and manages petabytes of data while maintaining the simplicity of operating inside a single database. With Limitless Database, you can focus on building high-scale applications without having to build and maintain complex solutions for scaling your data across multiple DB instances to support your workloads.

For more information, see Using Amazon Aurora PostgreSQL Limitless Database in the *Amazon Aurora User Guide*.

Amazon Amazon Aurora PostgreSQL Limitless Database follows the same engine version lifecycle policy as Aurora PostgreSQL. For more information, see Release calendars for Aurora PostgreSQL.

Topics

- Amazon Aurora PostgreSQL Limitless Database version 16.13-limitless
- Amazon Aurora PostgreSQL Limitless Database version 16.11-limitless
- Amazon Aurora PostgreSQL Limitless Database version 16.10-limitless
- Amazon Aurora PostgreSQL Limitless Database version 16.9-limitless
- Amazon Aurora PostgreSQL Limitless Database version 16.8-limitless
- Amazon Aurora PostgreSQL Limitless Database version 16.6-limitless
- Amazon Aurora PostgreSQL Limitless Database version 16.4-limitless

Amazon Aurora PostgreSQL Limitless Database version 16.13-limitless

This version of Aurora PostgreSQL Limitless Database is compatible with PostgreSQL 16.13. For more information about the improvements in PostgreSQL 16.13, see Aurora PostgreSQL 16.13.

Releases and patches

- Aurora PostgreSQL Limitless Database 16.13.102, September 3, 2026
- Aurora PostgreSQL Limitless Database 16.13.101, July 13, 2026
- Aurora PostgreSQL Limitless Database 16.13.100, April 25, 2026

Aurora PostgreSQL Limitless Database 16.13.102, September 3, 2026

Bug fixes

- Fixed a distributed deadlock between `GRANT` or `REVOKE` on a table and concurrent reads or writes of the same table.
- Fixed an issue where a node in a shard group could repeatedly restart while recovering an in-progress distributed transaction due to OID mismatch for database object. This made the node unavailable and required manual intervention.
- Fixed an issue where, in rare cases, a router continued using outdated writer information after a failover. Write requests routed through that router were rejected.

Aurora PostgreSQL Limitless Database 16.13.101, July 13, 2026

Bug fixes

- Fixed an issue with fast-path locking that might cause increased LWLock:LockManager contention.

Aurora PostgreSQL Limitless Database 16.13.100, April 25, 2026

Features

- Added support for batch `INSERT`, `UPDATE`, and `DELETE` operations with `RETURNING` clause.
- Added a virtual function to show whether a prepared transaction is detached.

Enhancements

- Improved performance for single-statement transactions using the extended query protocol.
- Improved read performance with future commit time optimization for time-based MVCC readers.
- Improved performance for single-shard `SELECT` queries by fetching all result rows at once instead of in batches. This optimization is enabled by default and can be controlled with the `rds_aurora.limitless_fetch_all` parameter.
- Improved distributed transaction performance by enabling two-phase commit backend affinity by default.

- Improved performance of multi-row `INSERT` statements with `RETURNING` clause by enabling batch insert optimization when the `RETURNING` list consists of `*` and column references.
- Reduced commit log extension spikes through proactive segment extension.

Bug fixes

- Fixed an issue where `SELECT` queries crashed when a sharded table attribute was referenced in a function.
- Fixed an issue where calling `nextval` on a sequence inside an explicit transaction blocked concurrent `nextval` calls on the same sequence when the call triggered a chunk refresh. The refresh held an `AccessExclusiveLock` on the sequence until the parent transaction ended, rather than releasing it when the chunk update completed.
- Fixed a crash caused by SIMD alignment.
- Fixed an issue where queries hung indefinitely when retrieving results from shard nodes under certain connection conditions.
- Fixed an issue where client and database connections weren't properly reset on RPC connection timeout and broken connections.
- Fixed an issue where `DROP DATABASE` with `FORCE` option intermittently failed with `database is being accessed by other users`.
- Reduced distributed deadlocks generated by autovacuum with table `DDL` operations.
- Fixed an issue where `CREATE SEQUENCE` failed with `not enough values to create distributed sequence` when using a narrow sequence range (such as the `smallint` type or a small `MAXVALUE`) with an `INCREMENT BY` value greater than 1. The automatic chunk size adjustment didn't account for the increment value, so it couldn't shrink the chunk size enough to fit the sequence range.

Amazon Aurora PostgreSQL Limitless Database version 16.11-limitless

This version of Aurora PostgreSQL Limitless Database is compatible with PostgreSQL 16.11. For more information about the improvements in PostgreSQL 16.11, see Aurora PostgreSQL 16.11.

Releases and patches

- Aurora PostgreSQL Limitless Database 16.11.102, September 1, 2026

- Aurora PostgreSQL Limitless Database 16.11.101, June 9, 2026
- Aurora PostgreSQL Limitless Database 16.11.100, February 25, 2026

Aurora PostgreSQL Limitless Database 16.11.102, September 1, 2026

Bug fixes

- Fixed a distributed deadlock between `GRANT` or `REVOKE` on a table and concurrent reads or writes of the same table.
- Fixed an issue where a node in a shard group could repeatedly restart while recovering an in-progress distributed transaction due to OID mismatch for database object. This made the node unavailable and required manual intervention.
- Fixed an issue where, in rare cases, a router continued using outdated writer information after a failover. Write requests routed through that router were rejected.
- Fixed an issue where queries hung indefinitely when retrieving results from a shard node. This occurred after the connection to that node was reset or stopped responding.
- Fixed an issue where errors returned when requesting a new chunk for a global sequence were misclassified. A sequence that reached its last value was reported as a connection failure. A transient failure could also stop `nextval` from returning new values.

Aurora PostgreSQL Limitless Database 16.11.101, June 9, 2026

Bug fixes

- Fixed an issue where a unique index did not guarantee uniqueness when created with a custom operator class.
- Fixed an issue where `DROP DATABASE` with `FORCE` option failed with `database is being accessed by other users`.
- Fixed an issue where cross-node version mismatch occurred after upgrade due to stale cached extension version.

Aurora PostgreSQL Limitless Database 16.11.100, February 25, 2026

Features

- Added support for `ALTER VIEW ... OWNER TO ...` statements.
- Added support for `pg_prewarm` extension.

Enhancements

- Enhanced `EXPLAIN` output for `INSERT INTO` with `SELECT` statements.
- Enhanced query performance for `ENUM` usage.
- Enhanced error messaging for `INSERT INTO` statements. The messaging now points out values where it failed.

Bug fixes

- Fixed an issue where `SELECT` statements deadlocked when sharded table attribute was referenced in a function and joined.
- Fixed `UNIQUE` and `PRIMARY KEY` constraints when used with `INCLUDE` clause where all columns (both constraint and included columns) have been incorrectly treated. This caused the index structure to differ from the original table definition.

Amazon Aurora PostgreSQL Limitless Database version 16.10-limitless

This version of Aurora PostgreSQL Limitless Database is compatible with PostgreSQL 16.10. For more information about the improvements in PostgreSQL 16.10, see Aurora PostgreSQL 16.10.

Releases and patches

- Aurora PostgreSQL Limitless Database 16.10.101
- Aurora PostgreSQL Limitless Database 16.10.100, February 24, 2026

Aurora PostgreSQL Limitless Database 16.10.101

Enhancements

- Enhanced `EXPLAIN` output for `INSERT INTO` with `SELECT`.

Bug fixes

- Fixed a crash when joining a table with a set-returning function that references the table's columns.
- Fixed a crash caused by SIMD alignment issues with generic wrapper functions.

Aurora PostgreSQL Limitless Database 16.10.100, February 24, 2026

Features

- Added support for ENUM as shard key type.
- Added support for `CHECK` constraints involving literals as well as expressions. For more information, see Constraints.
- Added support for `VIEW`s with foreign key constraints. For more information, see Foreign keys.
- Added support for Advisory Locks. For more information, see Advisory Locks in the PostgreSQL documentation.
- Added support for `pg_dump` and `pg_restore` for database migrations. You can dump from Aurora Limitless databases and restore to other Aurora Limitless clusters or regular PostgreSQL databases. This support includes preservation of sharded and reference table configurations when migrating between Aurora Limitless clusters using metadata capture functions. For more information, see Backing up and restoring Amazon Aurora PostgreSQL Limitless Database.

Enhancements

- Improved performance for schema and table lookups.
- Improved performance for shard split.
- Improved performance for `INSERT INTO` and `UPDATE` queries.

Bug fixes

- Fixed an issue with privilege grants which failed with `invalid role OID: 0` when all privileges are `GRANT`ed to public.
- Fixed an issue with `EXPLAIN` and `UPDATE` queries which failed with `wrong number of parameters for prepared statement`.

- Fixed an issue with `CREATE TABLE` which failed with `duplicate key value violates unique constraint`.
- Fixed an issue where database remained unusable after `DROP DATABASE` through JDBC.
- Fixed an issue with `UPDATE` queries on distributed tables which failed with `relation * does not exist`.
- Fixed an issue with `SELECT` queries with type casts which failed with `cannot cast type cstring to text[]`.
- Fixed an issue with `CREATE DATABASE` which failed with `connection_limit requires an integer value` when also setting `connection_limit`.
- Fixed table transformation from standard table to distributed table or reference table to keep Row Level Security Policies.
- Fixed correctness and data leak issues in Row Level Security (RLS) policies. We recommend to drop and re-create any existing RLS policies.
- Fixed `DROP POLICY` statement when used with `IF EXISTS`.
- Fixed incorrect result when selecting `tableoid` system column. The `tableoid` is the OID of the table, which is a distinct identification given to the database object by a given system. If the query is eligible for Single Shard Optimization, the `tableoid` will be obtained from the Shard. Otherwise, the `tableoid` will be obtained from the connected router. Different routers may result in different `tableoid` for the same query.
- Fixed stats update for tables with User Defined Types.
- Fixed an issue with `CREATE TABLE` which failed with `FATAL: Unexpected error occurred while committing transaction` when `debug_parallel_query` is set to on.

Amazon Aurora PostgreSQL Limitless Database version 16.9-limitless

This version of Aurora PostgreSQL Limitless Database is compatible with PostgreSQL 16.9. For more information about the improvements in PostgreSQL 16.9, see Aurora PostgreSQL 16.9.

Releases and patches

- Aurora PostgreSQL Limitless Database 16.9.103, February 11, 2026
- Aurora PostgreSQL Limitless Database 16.9.102, November 21, 2025

- Aurora PostgreSQL Limitless Database 16.9.101, November 6, 2025
- Aurora PostgreSQL Limitless Database 16.9.100, September 5, 2025

Aurora PostgreSQL Limitless Database 16.9.103, February 11, 2026

Enhancements

- Enhanced `EXPLAIN` output for `INSERT INTO` with `SELECT`.

Bug fixes

- Fixed an issue where `SELECT` statements did not return when sharded table attribute was referenced in a function and joined.

Aurora PostgreSQL Limitless Database 16.9.102, November 21, 2025

Enhancements

- Improved performance for shard split.
- Improved error messages when queries fail during (minor) upgrades due to inconsistent instance versions.

Bug fixes

- Fixed an issue where database remained unusable after `DROP DATABASE` through JDBC.
- Fixed an issue with privilege grants which failed with `invalid role OID: 0` when all privileges are `GRANT`ed to public.
- Fixed an issue with `SELECT` queries with type casts which failed with `cannot cast type cstring to text[]`.
- Fixed an issue with `CREATE DATABASE` which failed with `connection_limit requires an integer value` when also setting `connection_limit`.
- Fixed table transformation from standard table to distributed table or reference table to keep Row Level Security Policies.
- Fixed correctness and data leak issues in Row Level Security (RLS) policies. We recommend to drop and re-create any existing RLS policies.

- Fixed `DROP POLICY` statement when used with `IF EXISTS`.
- Fixed incorrect result when selecting `tableoid` system column. The `tableoid` is the OID of the table, which is a distinct identification given to the database object by a given system. If the query is eligible for Single Shard Optimization, the `tableoid` will be obtained from the Shard. Otherwise, the `tableoid` will be obtained from the connected router. Different routers may result in different `tableoid` for the same query.
- Fixed an issue where internal processes were no longer working properly after revoking `CONNECT` privilege for internal system roles.
- Fixed stats update for tables with User Defined Types.
- Fixed one edge case in resolving prepared transaction.

Aurora PostgreSQL Limitless Database 16.9.101, November 6, 2025

Bug fixes

- Fixed an issue where tables weren't deleted on shards when `CREATE`, `ALTER`, and `DROP` statements were repeatedly executed using prepared statements through JDBC or ODBC drivers (for example, when using `preferQueryMode=extendedCacheEverything` in JDBC), or when `CREATE`, `ALTER`, and `DROP` statements were executed as part of `PROCEDURE` or `FUNCTION`.
- Fixed incorrect results when querying tables using `UNIQUE INDEX` scans while the table had broken Heap-Only Tuple (HOT) chains from `UPDATE` statements.
- Fixed an issue where healthy nodes were unnecessarily replaced, causing system unavailability.

Aurora PostgreSQL Limitless Database 16.9.100, September 5, 2025

Features

- Added support for `CREATE INDEX IF NOT EXISTS`.
- Added support for SEQUENCES in the `pgstattuple` extension.
- Added support for the hstore extension. Note that hstore columns cannot be used as shard keys in sharded tables.
- Added support for the auto_explain extension.

Enhancements

- Reduced waiting period required between `DROP DATABASE` and `CREATE DATABASE` operations when using the same database name.
- Improved performance for `DELETE` and `UPDATE` operations involving semi-join and anti-join.
- Improved performance for `INSERT INTO ... SELECT FROM` statements with expressions or projections that can be pushed down to shards
- Improved error messages for detected deadlocks with involved queries listed in the **DETAIL** section.

Bug fixes

- Fixed an issue where the background worker pool could be completely exhausted by database internal processes.
- Fixed an issue where non-immutable functions in extensions unexpectedly failed with *permission denied* errors.
- Fixed *commit time is invalid* errors.
- Fixed an issue where `INSERT INTO` failed after the `ROLLBACK` of a `READ ONLY` transaction with the error ERROR: failed to execute remote query with message: transaction read-write mode must be set before any query.
- Fixed an issue where `SELECT` queries failed with ERROR: failed to execute remote query with message: collations are not supported by type integer.
- Fixed an issue where `DELETE FROM` failed with ERROR: failed to execute remote query.
- Fixed an issue where expressions in `DEFAULT/CHECK` constraints might generate incorrect backfill data for existing rows. This issue is seen specifically when the expression in the constraint relies on parenthesis.
- Fixed an issue with `PREPARE` and `EXECUTE` statements which failed with bind message supplies 2 parameters, but prepared statement requires 1 when the `PREPARE` statement used fewer parameters than it declared.
- Fixed an issue where `RESET` of `rds_aurora.limitless_explain_options` setting was not correctly reflected in `EXPLAIN` output.

Amazon Aurora PostgreSQL Limitless Database version 16.8-limitless

This version of Aurora PostgreSQL Limitless Database is compatible with PostgreSQL 16.8. For more information about the improvements in PostgreSQL 16.8, see Aurora PostgreSQL 16.8.

Releases and patches

- Aurora PostgreSQL Limitless Database 16.8.104, May 12, 2026
- Aurora PostgreSQL Limitless Database 16.8.103, October 30, 2025
- Aurora PostgreSQL Limitless Database 16.8.102, October 13, 2025
- Aurora PostgreSQL Limitless Database 16.8.101, June 30, 2025
- Aurora PostgreSQL Limitless Database 16.8.100, May 8, 2025

Aurora PostgreSQL Limitless Database 16.8.104, May 12, 2026

Bug fixes

- Fixed a file descriptor leak in `rds_aurora_limitless_get_max_connections`.

Aurora PostgreSQL Limitless Database 16.8.103, October 30, 2025

Bug fixes

- Fixed an issue with privilege grants which failed with `invalid role OID: 0` when all privileges are GRANTed to public.
- Fixed an issue with SELECT queries with type casts which failed with `cannot cast type cstring to text[]`.
- Fixed an issue with CREATE DATABASE which failed with `connection_limit requires an integer value` when also setting `connection_limit`.
- Fixed incorrect result when selecting `tableoid` system column. The `tableoid` is the OID of the table, which is a distinct identification given to the database object by a given system. If the query is eligible for Single Shard Optimization, the `tableoid` will be obtained from the Shard. Otherwise, the `tableoid` will be obtained from the connected router. Different routers may result in different `tableoid` for the same query.
- Fixed one edge case in resolving prepared transaction.

Aurora PostgreSQL Limitless Database 16.8.102, October 13, 2025

Bug fixes

- Fixed an issue where tables weren't deleted on shards when CREATE, ALTER, and DROP statements were repeatedly executed using prepared statements through JDBC or ODBC drivers (for example, when using preferQueryMode=extendedCacheEverything in JDBC), or when CREATE, ALTER, and DROP statements were executed as part of PROCEDURE or FUNCTION.
- Fixed incorrect results when querying tables using UNIQUE INDEX scans while the table had broken Heap-Only Tuple (HOT) chains from UPDATE statements.
- Fixed an issue where healthy nodes were unnecessarily replaced, causing system unavailability.

Aurora PostgreSQL Limitless Database 16.8.101, June 30, 2025

Enhancements

- Improved error messages for detected deadlocks, now listing the involved queries in the DETAIL section.
- Added support for sub-query containing tableoid as target list.

Bug fixes

- Fixed the ANALYZE SQL query result to also include foreign tables.
- Fixed multiple issues which might lead to a database restart.
- Fixed an issue with PREPARE and EXECUTE statements which failed incorrectly with bind message supplies 2 parameters, but prepared statement requires 1 when the PREPARE statement used less parameters than declared.
- Fixed multiple issues in vacuum operations leading to increased space consumption.
- Fixed an issue with INSERT statements after rolling back a READ_ONLY transaction.
- Fixed an issue where DELETE statements with RETURNING clause fails.

Aurora PostgreSQL Limitless Database 16.8.100, May 8, 2025

Features

- Added support for the `ltree` extension. `ltree` datatype columns cannot be used as shard keys in sharded tables.
- Added support for the `btree_gist` extension in Aurora PostgreSQL Limitless Database. Exclusion constraints using GIST index are not supported. For example, the following command is not supported:

```
CREATE TABLE zoo (
    cage INTEGER,
    animal TEXT,
    EXCLUDE USING GIST (cage WITH =, animal WITH <>)
);
```

Enhancements

- Improved query performance in these scenarios:
  - Queries with range clauses.
  - Multiple tuple access with different shard keys from same shard.
  - Delete and update operations involving semi- and anti-joins.
- Enhanced async foreign scan nodes with prefetch capability.
- Strengthened deadlock detection fault tolerance.

Bug fixes

- Fixed an issue where database backends stopped responding to system signals, which could cause DROP DATABASE operations to hang.
- Fixed a race condition in commit log (clog) background processing that causes *commit time is invalid* errors.
- Fixed an issue that could cause unexpected crashes during automatic table analysis operations.

Amazon Aurora PostgreSQL Limitless Database version 16.6-limitless

This version of Aurora PostgreSQL Limitless Database is compatible with PostgreSQL 16.6. For more information about the improvements in PostgreSQL 16.6, see Aurora PostgreSQL 16.6.

Releases and patches

- Aurora PostgreSQL Limitless Database 16.6.103, October 13, 2025
- Aurora PostgreSQL Limitless Database 16.6.102, June 30, 2025
- Aurora PostgreSQL Limitless Database 16.6.101, April 17, 2025
- Aurora PostgreSQL Limitless Database 16.6.100, January 24, 2025

Aurora PostgreSQL Limitless Database 16.6.103, October 13, 2025

Bug fixes

- Fixed an issue where tables weren't deleted on shards when `CREATE`, `ALTER`, and `DROP` statements were repeatedly executed using prepared statements through JDBC or ODBC drivers (for example, when using `preferQueryMode=extendedCacheEverything` in JDBC), or when `CREATE`, `ALTER`, and `DROP` statements were executed as part of `PROCEDURE` or `FUNCTION`.
- Fixed incorrect results when querying tables using `UNIQUE INDEX` scans while the table had broken Heap-Only Tuple (HOT) chains from `UPDATE` statements.
- Fixed an issue where healthy nodes were unnecessarily replaced, causing system unavailability.

Aurora PostgreSQL Limitless Database 16.6.102, June 30, 2025

Enhancements

- Improved error messages for detected deadlocks now list the involved queries in the `DETAIL`.
- Improved the distribute deadlock detection algorithm to be arbitrary resilient to network or node failures.
- Added support for sub-query containing tableoid as target list.

Bug fixes

- Fixed the `ANALYZE` SQL query result to include foreign tables.
- Fixed multiple issues which might lead to a database restart.
- Fixed an issue with `PREPARE` and `EXECUTE` statements which failed incorrectly with bind message supplies 2 parameters, but prepared statement requires 1 when the `PREPARE` statement uses less parameters than declared.

- Fixed multiple issues in vacuum operations leading to increased space consumption.
- Fixed an issue with `INSERT` statements after rolling back a `READ_ONLY` transaction.
- Fixed an issue where `DELETE` statements with `RETURNING` clause failed.
- Fixed cases where expressions in `DEFAULT/CHECK` constraints can generate incorrect results, specifically when the expression in the constraint relies on parenthesis for generating the correct result.

Aurora PostgreSQL Limitless Database 16.6.101, April 17, 2025

This release includes Aurora PostgreSQL patches till 16.6.3.

Bug fixes

- Fixed multiple issues that might lead to brief periods of unavailability.
- Fixed a correctness issue when `limitless_minimum_adaptive_fetch_size` is set to lower than the default value (100).
- Enhanced error handling for querying tableoid attribute of a relation in Aurora PostgreSQL Limitless Database, considering it might have different values across nodes in `DBShardGroup`.
- Fixed a permission issue that can occur when using `rds_aurora.limitless_active_shard_key`. This resolves permission errors when retrieving data.
- Fixed a race condition in clog background operation whcih may cause the client to recieve the *commit time is invalid* error.
- Optimized execution of distributed functions with variable length shard key. Previously, routers performed distributed functions but they are performed locally now on a single shard as per shard key.
- Fixed an error when executing `update/delete` on standard table joining reference tables.
- Fixed an issue where any user could invoke specific internal limitless functions.
- Fixed an issue that lead to incorrect rollback for subtransaction during node crash.
- Fixed issues where expressions with nested parentheses in `DEFAULT/CHECK` constraints might generate incorrect results.

Aurora PostgreSQL Limitless Database 16.6.100, January 24, 2025

Features

- Aurora PostgreSQL Limitless Database now supports Aurora PostgreSQL version 16.6.
- You can now install and use the `btree_gin` extension.
- The `DISCARD` Data Manipulation Language (DML) command is supported.

Enhancements

- Improved query performance with better pushdown capabilities for queries that include reference tables within subqueries. This enhancement optimizes query execution, potentially resulting in faster performance for complex queries involving reference table joins in subqueries.
- Enhanced the error handling for `pg_advisory_lock`. Previously, attempts to use this unsupported feature didn't generate an explicit error message, potentially leading to unexpected behavior. Now, users will receive a clear error notification when attempting to use `pg_advisory_lock`, ensuring better clarity and preventing unintended consequences.

Bug fixes

- Fixed an issue where certain `ALTER TABLE` and `CREATE TABLE` commands fail with the error: Unable to deparse the given statement.
- Fixed an issue where an `ALTER TABLE` command with a `NOT NULL` or `DEFAULT` constraint fails when it contains functions unsafe to push down to shards (such as volatile functions), requiring backfilling data in existing rows.

Known issues

- Setting the `rds_aurora.limitless_minimum_adaptive_fetch_size` variable can cause incorrect results.

Amazon Aurora PostgreSQL Limitless Database version 16.4-limitless

This version of Aurora PostgreSQL Limitless Database is compatible with PostgreSQL 16.4. For more information about the improvements in PostgreSQL 16.4, see Aurora PostgreSQL 16.4.

Releases and patches

- Aurora PostgreSQL Limitless Database 16.4.106, October 13, 2025
- Aurora PostgreSQL Limitless Database 16.4.105, April 17, 2025
- Aurora PostgreSQL Limitless Database 16.4.104, November 19, 2024
- Aurora PostgreSQL Limitless Database 16.4.103, October 31, 2024

Aurora PostgreSQL Limitless Database 16.4.106, October 13, 2025

Bug fixes

- Fixed an issue where tables weren't deleted on shards when `CREATE`, `ALTER`, and `DROP` statements were repeatedly executed using prepared statements through JDBC or ODBC drivers (for example, when using `preferQueryMode=extendedCacheEverything` in JDBC), or when `CREATE`, `ALTER`, and `DROP` statements were executed as part of `PROCEDURE` or `FUNCTION`.
- Fixed incorrect results when querying tables using `UNIQUE INDEX` scans while the table had broken Heap-Only Tuple (HOT) chains from `UPDATE` statements.
- Fixed an issue where healthy nodes were unnecessarily replaced, causing system unavailability.

Aurora PostgreSQL Limitless Database 16.4.105, April 17, 2025

Bug fixes

- Fixed multiple issues that could lead to brief periods of unavailability.
- Fixed an issue resulting in incorrect results for anti-join queries containing a predicate on an outer relation.
- Added pushdown capability for the following system functions:
  - `pg_char_to_encoding`
  - `pg_encoding_to_char`

- `textanycat`
- `anytextcat`

- Enhanced error handling for `pg_advisory_lock` in Aurora PostgreSQL Limitless Database. With this change, you receive a clear error notification when attempting to use `pg_advisory_lock`.
- Fixed an issue where adding an expression with nested parentheses in `DEFAULT/CHECK` constraints might generate incorrect results.

Aurora PostgreSQL Limitless Database 16.4.104, November 19, 2024

Bug fixes

- Fixed an issue where deadlocks can occur in processing Data Definition Language (DDL) statements when `CREATE INDEX CONCURRENTLY` runs.
- Fixed an issue where an error in distributed deadlock resolution can block the detection of subsequent distributed deadlocks.
- Fixed an issue where DDL statements with underlying Data Manipulation Language (DML) statements (such as `CREATE TABLE AS` or calling for a table with data) result in errors if the `rds_aurora.limitless_active_shard_key` variable is used in a session.
- Fixed an issue where a shard split operation results in an error.
- Fixed an issue where the `rds_aurora.limitless_alter_table_type_sharded` procedure for converting the table type to sharded fails if the `rds_aurora.limitless_alter_table_type_sharded` variable is set.
- Fixed an issue in the deparsing logic of polymorphic objects that resulted in invalid queries not producing errors when the implicit cast of passing data caused incorrect object versions to be used.

Known issues

- An issue can occur when part of a query is converted to a left or anti-join condition. In these cases, if the inner relation has no results a null row is used.
- An issue can occur when adding a column with a `NOT NULL` or `DEFAULT` constraint, that contains functions unsafe to push down to shards (such as volatile functions), requires backfilling data in existing rows.

- An issue can occur when the deparsing logic for preparing queries to shards doesn't use parentheses where possible. This can lead to errors when `COLLATE` is used in queries.

Aurora PostgreSQL Limitless Database 16.4.103, October 31, 2024

Release 16.4.103 is the GA version of Aurora PostgreSQL Limitless Database.

For information on this release, see Using Amazon Aurora PostgreSQL Limitless Database in the *Amazon Aurora User Guide*.

Babelfish for Aurora PostgreSQL updates

Following, you can find information about versions of the Babelfish that have been released for Aurora PostgreSQL. Babelfish is an option available with Aurora PostgreSQL version 13.4 and higher releases. Updates to Babelfish become available with certain new releases of the Aurora PostgreSQL database engine.

For information about Aurora PostgreSQL extensions with Babelfish, see Using Aurora PostgreSQL extensions with Babelfish.

For information about Babelfish version updates, see Babelfish version updates.

For a list of supported and unsupported functionality across different Babelfish releases, see Babelfish for Aurora PostgreSQL reference.

Topics

- Babelfish for Aurora PostgreSQL 6.x versions
- Babelfish for Aurora PostgreSQL 5.x versions
- Babelfish for Aurora PostgreSQL 4.x versions
- Babelfish for Aurora PostgreSQL 3.x versions (includes some deprecated versions)
- Babelfish for Aurora PostgreSQL 2.x versions (includes some deprecated versions)
- Babelfish for Aurora PostgreSQL 1.x versions (includes some deprecated versions)

Babelfish for Aurora PostgreSQL 6.x versions

Version updates

- Babelfish for Aurora PostgreSQL 6.1
- Babelfish for Aurora PostgreSQL 6.0

Babelfish for Aurora PostgreSQL 6.1

This release of Aurora Babelfish is provided with Aurora PostgreSQL 18.4. For more information about the improvements in Aurora PostgreSQL 18.4, see Amazon Aurora PostgreSQL updates. Babelfish for Aurora PostgreSQL 6.1 adds several new features, enhancements, and fixes. For

more information about Babelfish for Aurora PostgreSQL, see Working with Babelfish for Aurora PostgreSQL.

Aurora Babelfish release 6.1.0, August 21, 2026

New Features

- Added support for STGeometryType(), STNumPoints(), Parse(), MakeValid() and STMPointFromText() Geospatial functions.
- Added support for Multipoint instances in Babelfish.
- Babelfish now extends support for Shared Plan Cache to T-SQL queries.
- Added support for ELEMENTS directive in FOR XML RAW and FOR XML PATH.

Critical enhancements

- Fixed an issue that could cause crash in SPI_finish after Out Of Memory error.
- Fixed crash in FOR XML PATH queries when processing all-NULL rows without a root element.
- Improved query performance when expanding the views and procedures in SSMS Object Explorer.

High Priority stability enhancements

- Fixed sys.fn_varbintohexsubstring function definition after major version upgrade.
- Fixed an issue that could cause a database reboot when dropping a temporary table from within a nested stored procedure.
- Fixed an issue where queries with local variables could return inconsistent results when using generic query plans.
- Fixed an issue that could cause a database reboot when dropping a temporary table from within a nested stored procedure.
- Fixed an issue where creating a function or procedure in a schema created from the PostgreSQL endpoint could cause a database reboot.

Additional improvements and enhancements

- Improved memory handling in FOR XML query processing.

- Fixed an issue where sp_execute returned an error when invoked with named parameters.
- Fixed FOR XML RAW to properly handle empty element names by omitting the row wrapper element instead of generating invalid empty tags.
- Fixed DATETIME2FROMPARTS function to properly handle fractional second values in the range 32786 to 9999999.
- Improved memory handling in PrepareRowDescription and rewrite_if_condition functions.
- Fixed an issue where go-sqlcmd client driver failed to return query results.
- Fixed Memory management issue in IsTopTransactionName function.
- Fixed allocation of savepoint_name in correct memory context in pltsql_eval_txn_data.

Babelfish for Aurora PostgreSQL 6.0

This release of Aurora Babelfish is provided with Aurora PostgreSQL 18.3. For more information about the improvements in Aurora PostgreSQL 18.3, see Amazon Aurora PostgreSQL updates. Babelfish for Aurora PostgreSQL 6.0 adds several new features, enhancements, and fixes. For more information about Babelfish for Aurora PostgreSQL, see Working with Babelfish for Aurora PostgreSQL.

Aurora Babelfish release 6.0.0, June 10, 2026

New Features

- Added support for Eager aggregation, which pushes aggregation before joins to improve query performance. Controlled by GUCs `babelfishpg_tsql.enable_eager_aggregate` (default: ON) and `min_eager_agg_group_size` to set the minimum average group size required to consider applying Eager aggregation (default: 8).
- Added support for Polygon instances for geography/geometry datatype.
- Added support for implicit cast from (n)varchar/(n)char to datetimeoffset datatype.
- Added support for sys.fn_varbintohexstr system object.

Critical enhancements

- Fixed an issue where executing queries from PostgreSQL endpoint in Active Directory Authentication enabled instances may lead to a reboot.
- Fixed an issue where update with output clause may skip rows during concurrent updates.

- DROP LOGIN now correctly returns an error when attempting to drop a login that is the owner of a database.

High Priority stability enhancements

- Fixed incorrect return datatype in UNION queries involving datetimeoffset, (n)varchar and datetime types.
- Fixed issue in coalesce involving datetimeoffset and (n)varchar types.
- Fixed UNION and CASE expressions with varbinary and string literals to correctly resolve to varchar instead of varbinary.
- Restricted ownership change of Babelfish objects from PG port.
- Fixed an issue in procedure calls leading to incorrect lifecycle handling of temp tables.
- Restricted users from altering Babelfish objects in sys schema.
- Fixed the scale/precision handling for MIN/MAX functions on CHAR/NCHAR datatypes.
- Fixed high CPU utilization during concurrent connection establishment for pyODBC connections.
- Fixed inconsistent index scans for binary/varbinary comparison operators and added cross-type support.
- Fixed an issue in nested procedure calls that caused temp table cleanup failures and parser errors.
- Blocked ALTER AUTHORIZATION on database when the new owner is a database role, fixed server role, or sysadmin.

Additional improvements and enhancements

- Fixed an issue where casting string values to sqlvariant may cause client to hang.
- Fixed cast and convert functions between datatypes (n)char & (var)binary.
- Added fix to handle UDT datatypes in DATEADD() function.
- Fixed handling for white space characters in the ISNUMERIC() function to match T-SQL behavior.
- Fixed an issue in SELECT queries with reserved keywords used as column aliases.
- Fixed output format when casting datetime and smalldatetime to (n)varchar/(n)char.
- Fixed handling of scale/precision for empty string casting to binary.
- Fixed concatenation of binaries to produce expected results.

- Fixed trailing blanks being incorrectly treated as insignificant in LIKE operator in case of exact pattern matching.
- Fixed an issue where primary key information was not being sent in TDS response for ADO.NET FillSchema() operations.
- Fixed scale/precision handling for concatenated results of binaries.
- Fixed a rare issue where parallel query runs into unexpected error when table OID reaches to certain limit.
- Fixed an issue where MONEY type conversion incorrectly rejected few valid ASCII and special characters.
- Fixed convert function to properly apply style parameter when converting SMALLMONEY to string types, ensuring correct formatting for styles 0, 1, 2, and 126 matching with T-SQL behavior.
- Fixed multiple convert function issues for MONEY/SMALLMONEY type to string conversions, including proper handling of negative style parameters and invalid style value.

Babelfish for Aurora PostgreSQL 5.x versions

Version updates

- Babelfish for Aurora PostgreSQL 5.6
- Babelfish for Aurora PostgreSQL 5.5
- Babelfish for Aurora PostgreSQL 5.4
- Babelfish for Aurora PostgreSQL 5.3
- Babelfish for Aurora PostgreSQL 5.2
- Babelfish for Aurora PostgreSQL 5.1

Babelfish for Aurora PostgreSQL 5.6

This release of Aurora Babelfish is provided with Aurora PostgreSQL 17.10. For more information about the improvements in Aurora PostgreSQL 17.10, see Amazon Aurora PostgreSQL updates. Babelfish for Aurora PostgreSQL 5.6 adds several new features, enhancements, and fixes. For more information about Babelfish for Aurora PostgreSQL, see Working with Babelfish for Aurora PostgreSQL.

Aurora Babelfish release 5.6.0, August 21, 2026

New Features

- Added support for STGeometryType(), STNumPoints(), Parse(), MakeValid() and STMPointFromText() Geospatial functions.
- Added support for Multipoint instances in Babelfish.
- Babelfish now extends support for Shared Plan Cache to T-SQL queries.
- Added support for ELEMENTS directive in FOR XML RAW and FOR XML PATH.

Critical enhancements

- Fixed an issue that could cause crash in SPI_finish after Out Of Memory error.
- Fixed crash in FOR XML PATH queries when processing all-NULL rows without a root element.
- Improved query performance when expanding the views and procedures in SSMS Object Explorer.

High Priority stability enhancements

- Fixed sys.fn_varbintohexsubstring function definition after major version upgrade.
- Fixed an issue that could cause a database reboot when dropping a temporary table from within a nested stored procedure.
- Fixed an issue where queries with local variables could return inconsistent results when using generic query plans.
- Fixed an issue that could cause a database reboot when dropping a temporary table from within a nested stored procedure.
- Fixed an issue where creating a function or procedure in a schema created from the PostgreSQL endpoint could cause a database reboot.

Additional improvements and enhancements

- Improved memory handling in FOR XML query processing.
- Fixed an issue where sp_execute returned an error when invoked with named parameters.
- Fixed FOR XML RAW to properly handle empty element names by omitting the row wrapper element instead of generating invalid empty tags.

- Fixed DATETIME2FROMPARTS function to properly handle fractional second values in the range 32786 to 9999999.
- Improved memory handling in PrepareRowDescription and rewrite_if_condition functions.
- Fixed an issue where go-sqlcmd client driver failed to return query results.
- Fixed Memory management issue in IsTopTransactionName function.
- Fixed allocation of savepoint_name in correct memory context in pltsql_eval_txn_data.

Babelfish for Aurora PostgreSQL 5.5

This release of Aurora Babelfish is provided with Aurora PostgreSQL 17.9. For more information about the improvements in Aurora PostgreSQL 17.9, see Amazon Aurora PostgreSQL updates. Babelfish for Aurora PostgreSQL 5.5 adds several new features, enhancements, and fixes. For more information about Babelfish for Aurora PostgreSQL, see Working with Babelfish for Aurora PostgreSQL.

Aurora Babelfish release 5.5.0, April 6, 2026

New Features

- Added support for Polygon instances for geography/geometry datatype.
- Added support for implicit cast from (n)varchar/(n)char to datetimeoffset datatype.
- Added support for sys.fn_varbintohexstr system object.

Critical enhancements

- Fixed an issue where executing queries from PostgreSQL endpoint in Active Directory Authentication enabled instances may lead to a reboot.
- Fixed an issue where update with output clause may skip rows during concurrent updates.
- DROP LOGIN now correctly returns an error when attempting to drop a login that is the owner of a database.

High Priority stability enhancements

- Fixed incorrect return datatype in UNION queries involving datetimeoffset, (n)varchar and datetime types.
- Fixed issue in coalesce involving datetimeoffset and (n)varchar types.

- Fixed UNION and CASE expressions with varbinary and string literals to correctly resolve to varchar instead of varbinary.
- Restricted ownership change of Babelfish objects from PG port.
- Fixed an issue in procedure calls leading to incorrect lifecycle handling of temp tables.
- Restricted users from altering Babelfish objects in sys schema.
- Fixed the scale/precision handling for MIN/MAX functions on CHAR/NCHAR datatypes.
- Fixed high CPU utilization during concurrent connection establishment for pyODBC connections.
- Fixed inconsistent index scans for binary/varbinary comparison operators and added cross-type support.
- Blocked ALTER AUTHORIZATION on database when the new owner is a database role, fixed server role, or sysadmin.

Additional improvements and enhancements

- Fixed an issue where casting string values to sqlvariant may cause client to hang.
- Fixed cast and convert functions between datatypes (n)char & (var)binary.
- Added fix to handle UDT datatypes in DATEADD() function.
- Fixed handling for white space characters in the ISNUMERIC() function to match T-SQL behavior.
- Fixed an issue in SELECT queries with reserved keywords used as column aliases.
- Fixed output format when casting datetime and smalldatetime to (n)varchar/(n)char.
- Fixed handling of scale/precision for empty string casting to binary.
- Fixed concatenation of binaries to produce expected results.
- Fixed an issue where primary key information was not being sent in TDS response for ADO.NET FillSchema() operations.
- Fixed scale/precision handling for concatenated results of binaries.
- Fixed a rare issue where parallel query runs into unexpected error when table OID reaches to certain limit.
- Fixed an issue where MONEY type conversion incorrectly rejected few valid ASCII and special characters.
- Fixed convert function to properly apply style parameter when converting SMALLMONEY to string types, ensuring correct formatting for styles 0, 1, 2, and 126 matching with T-SQL behavior.

- Fixed trailing blanks being incorrectly treated as insignificant in LIKE operator in case of exact pattern matching.
- Fixed multiple convert function issues for MONEY/SMALLMONEY type to string conversions, including proper handling of negative style parameters and invalid style value.

Babelfish for Aurora PostgreSQL 5.4

This release of Aurora Babelfish is provided with Aurora PostgreSQL 17.7. For more information about the improvements in Aurora PostgreSQL 17.7, see Amazon Aurora PostgreSQL updates. Babelfish for Aurora PostgreSQL 5.4 adds several new features, enhancements, and fixes. For more information about Babelfish for Aurora PostgreSQL, see Working with Babelfish for Aurora PostgreSQL.

Aurora Babelfish release 5.4.2, March 20, 2026

Critical stability enhancements

- Fixed an issue where executing queries from PostgreSQL endpoint in Active Directory Authentication enabled instances may lead to a reboot.

Aurora Babelfish release 5.4.1, January 16, 2026

Critical stability enhancements

- Fixed an issue where an UPDATE statement with OUTPUT clause may skip rows when there are concurrent updates on the same row.

High Priority stability enhancements

- Fixed an issue in nested procedure calls that caused temp table cleanup failures and parser errors.

Aurora Babelfish release 5.4.0, December, 18, 2025

New Features

- Enabled support of SELECT TOP N PERCENT clause with few limitations.

- Enabled support for Linestring instances for geography/geometry datatypes.
- Enabled support for system procedures sp_xml_preparedocument, sp_xml_removedocument and OPENXML.
- Enabled support for XML method .VALUE() for XML Data Types.
- Enabled support for ownership chaining for object references inside views and stored procedures/functions. Permission checking on underlying objects is determined by either the user's direct permissions or through ownership chaining.
- Enabled support of sys.time_zone_info view
- Enabled support for Values clause and subquery columns in SELECT list in FOR JSON AUTO functionality

Critical enhancements

- Fixed STPointFromText() and Point() to throw error on NULL arguments.
- Fixed issues with Geometry/Geography to (var)char and (var)binary conversions.
- Fixed function definition of STPointFromText(), STPointFromText(), STAsText() and STAsBinary().
- Fixed bytea to Geometry/Geography conversion for Point instance.
- ASCII function returns incorrect results with argument type as Binary and Varbinary.
- Active snapshots when system catalogs are being updated while ResetTempTableNamespace in TDS.
- Fixed crashes and intermittent errors caused by memory corruption when a parameter is assigned to itself.

High Priority stability enhancements

- Fixed an issue where user can not be dropped when permissions have been granted to that user.
- Added support for the planner to choose index scan for queries having predicates comparing numeric and money/smallmoney data types.
- Fixed precision/scale for Round() function.
- Fixed an issue where rollback to savepoint in some cases failed to send the correct transaction state token to the client, causing subsequent operations in the transaction to fail.
- Fixed an issue where errors in pg_cron job was leading to server reboot.

Additional improvements and enhancements

- Fixed an issue to allow concurrent UPDATE operations with OUTPUT clauses.
- Fixed an issue which resets the escape hatch settings to default with the first temp table creation.
- Fixed Datetime and Varbinary to Binary CAST functions.
- Fixed an issue to match CONVERT and CAST function return values for Binary type.
- Fixed INSERT INTO table DEFAULT VALUES for domain types, by setting appropriate function return type.
- Fixed an issue where running multi-Statement table valued function throws syntax error if the database name contains a symbol for an operator.
- Fixed REVOKE permission execution to correctly handle overlapping schema-level and object-level grants.
- Enabled support for the NULL/NOT NULL syntax in ALTER TABLE ALTER COLUMN statements.
- Add identifier delimiters to handle special characters in login and role names.
- Fixed indexes that were created on top of T-SQL temporary tables to correctly follow transaction semantics.
- Fixed various mathematical functions for Money and smallmoney datatype.
- Fixed an issue to persist column level permissions when modifying views using ALTER VIEW.
- Enabled support to allow alter on functions with dependent weak schemabinding views.
- Fixed issue with Geometry/Geography static methods when using delimited identifiers for data types.
- Fixed return type of SQRT() function to float.
- Fixed issues with assignment of multibyte characters to local variable of type nchar/nvarchar.
- Added empty string handling in ISNUMERIC(), to ensure compatibility with T-SQL behavior.
- Fixed DATALENGTH() to return correct byte length value for various datatypes and their UDTs.
- Fixed DATETIME to VARBINARY CAST function.
- Fixed precision/scale in SELECT INTO while using with GROUP BY clause.
- Fixed an issue of protocol error in TDS stream due to Numeric/Decimal overflow.
- Fixed issues with CTE logic and missing intermediate levels in the output of FOR JSON AUTO clause.

- Fixed an issue related to LIKE operator where ESCAPE character does not work as expected when ESCAPE character comes after wildcard in pattern.
- Fixed an issue which occurs when parameter of type binary(8) passed from .NET driver.

Babelfish for Aurora PostgreSQL 5.3

This release of Aurora Babelfish is provided with Aurora PostgreSQL 17.6. For more information about the improvements in Aurora PostgreSQL 17.6, see Amazon Aurora PostgreSQL updates. Babelfish for Aurora PostgreSQL 5.3 adds several new features, enhancements, and fixes. For more information about Babelfish for Aurora PostgreSQL, see Working with Babelfish for Aurora PostgreSQL.

Aurora Babelfish release 5.3.2, May 07, 2026

Critical stability enhancements

- Fixed an issue where executing queries from PostgreSQL endpoint in Active Directory Authentication enabled instances may lead to a reboot.

Aurora Babelfish release 5.3.1, November 25, 2025

Critical stability enhancements

- Fixed crashes and intermittent errors caused by memory corruption when a parameter is assigned to itself.

Aurora Babelfish release 5.3.0, November 25, 2025

New Features

- Added support for boolean operators and prefix term grammer in T-SQL CONTAINS clause for Full-Text Search .
- Added support for Z-M flags for Point Instances and Z, M, HasZ and HasM functions for GEOMETRY and GEOGRAPHY datatypes .
- Added support for sp_helplogins stored procedure.
- Enabled Support for weak binding views with few limitations.

Critical enhancements

- Fixed an issue during TDS Reset Connection in certain situations.
- Fixed an issue in GroupAD where login with mapped user should not have access to guest privileges.
- Improved the performance of queries using the ISNUMERIC() function in predicates.
- Added support for queries to choose index scan for queries having predicates comparing numeric and integer data types.

High Priority stability enhancements

- Fixed overflow checks in all arithmetic operations with money, smallmoney being a higher precedence operand.
- Fixed the output datatype for all arithmetic operations involving smallmoney and bit.
- Fixed behavior of certain math functions like CEIL, ROUND, POWER and FLOOR for money and smallmoney data types.
- Fixed issue with connection crash during arithmetic operations on smallmoney and int.
- Fixed overflow checks in all arithmetic/numeric operations with smallmoney/money being a operand.
- Fixed an issue with DATENAME() to gives correct value of TZOFFSET part.
- Handling for CHAR()/NCHAR() function to return NULL instead of errors when values are out of range.
- Handling for NCHAR() function to accept inputs that can be converted to integers.
- Fixed PATINDEX() function to correctly finds patterns at the end of text and handles wildcard searches accurately.
- Enabled index usage for Accent Sensitive / Insensitive collation for LIKE operator when the pattern is EXACT or PREFIX or INFIX match with following conditions:
  - For Accent Sensitive collation, user needs to create index from TSQL endpoint : CREATE INDEX <index_name> ON <table_name>(<column_name>)
  - For Accent Insensitive collation, user needs to create index from PSQL endpoint: CREATE INDEX <index_name> ON <schema_name>.<table_name>(sys.remove_accents_internal_using_cache(<column_name>))
- Fixed an issue where TRY_CAST and TRY_CONVERT was incorrectly rounding decimal values when casting to integer types, instead of truncating the fractional part.

- Fixed precision and scale for arithmetic operations between money/smallmoney and numeric and for money/smallmoney in union operators.
- Fixed precision and scale handling for case expressions and nested case expressions when with numeric and smallmoney/money branches.
- Fixed precision and scale handling for numeric expressions with sub-expressions as money/smallmoney or fixed length datatypes.
- Fixed an issue with handling of bigint and money/smallmoney multiplication operations.
- Fixed an issue where money/smallmoney multiplications was incorrectly truncating decimal values in result, insetad of rounding the fractional part.
- Fixed precision and scale handling for SUM()/AVG() functions with money/smallmoney and fixed length datatypes.
- Fixed an issue with airthetic operations between numeric variable and fixed length variables.
- Fixed precision and scale handling for aggregate functions with numeric.
- Fixed an issue with babelfish connections restored during ZDP.
- Fixed an issue with RESET ALL command from postgres endpoint.
- Fixed an issue with response packets when reading large nvarchar(max) data, which could cause ArgumentOutOfRangeException with .NET driver.
- Fixed an issue where parallelism won't be used for pltsql RETURN expression.
- Fixed permission denied issue in cross-db table valued functions.
- Added handling for empty input string handling in date and time datatypes.
- Fixed precision and scale handling for money/smallmoney while creating objects, casts, variables and user defined datatypes using it.
- Fixed an issue to preserve Timezone information during casting from string to datetimeoffset.
- Fixed Function QUOTENAME() to return correct strings.
- Added handling of binary arguments for Len() function.
- Fixed the precision and scale for aggregate function that have *(all columns) as input.
- Fixed an issue for CaseExpr with numeric computation.
- Fixed a crash in queries using 'FOR JSON AUTO' and 'JSON PATH'.
- Fixed rounding off issue during storing datetime datatype. Existing users should run the following query from TSQL endpoint to update their existing data: UPDATE <table_name> SET <datetime_col> = CAST(CAST(<datetime_col> as VARCHAR) AS DATETIME).

- Fixed datetime comparison in Babelfish to match TSQL behavior of treating datetime values within 0.00333 second precision as equal.

Additional improvements and enhancements

- Fixed an issue with OBJECT_DEFINITION function where it was trucating the output after 4000 characters.
- Fixed the database_principals view to display the correct SID.
- Handle PostgreSQL reserved keywords in Cursor operations.
- Added support for sys.server_permissions, sys.sql_logins views and sys.fn_varbintohexsubstring system function.
- Fixed an issue while adding a column with default value which resulted in an error.
- Fixed an issue with INSERT ... EXECUTE statements in stored procedures related to nested levels.

Babelfish for Aurora PostgreSQL 5.2

This release of Aurora Babelfish is provided with Aurora PostgreSQL 17.5. For more information about the improvements in Aurora PostgreSQL 17.5, see Amazon Aurora PostgreSQL updates. Babelfish for Aurora PostgreSQL 5.2 adds several new features, enhancements, and fixes. For more information about Babelfish for Aurora PostgreSQL, see Working with Babelfish for Aurora PostgreSQL.

Aurora Babelfish release 5.2.2, January 15, 2026

Critical stability enhancements

- Fixed crashes and intermittent errors caused by memory corruption when a parameter is assigned to itself.

Aurora Babelfish release 5.2.1, August 08, 2025

Critical stability enhancements

- Fixed an issue during TDS Reset Connection in certain situations.

High priority stability enhancements

- Fixed a crash in queries using `FOR JSON AUTO` and `JSON PATH`.
- Fixed an issue with babelfish connections restored during ZDP.

Aurora Babelfish release 5.2.0, June 30, 2025

New Features

- Added CREATE OR ALTER VIEW / ALTER VIEW syntax support in Babelfish with few limitations.
- Added support of Transact-SQL UNPIVOT operators for Babelfish.
- Added support for `STDimension`, `STDisjoint`, `STIntersects`, `STIsClosed`, `STIsEmpty`, `STIsValid` Geospatial functions.
- Added support for collation in partition functions and partitioning columns.
- Enabled support for scripting logins in SSMS for Babelfish.
- Added support for column_list in T-SQL CONTAINS clause for Full-Text Search.

Critical enhancements

- Added "+" and "-" operator for varbinary.
- Added new GUCs `babelfishpg_tsql.apg_enable_correlated_scalar_transform` and `babelfishpg_tsql.apg_enable_subquery_cache` to control subquery optimization features in Babelfish. The new GUCs are `ON` by default.
- Added support for larger server hello messages during SSL handshake by segmenting them into 4096 byte packets.
- Added support for CAST from VARBINARY to DATETIME in Babelfish.
- Added support for altering user/role in Babelfish GroupAD for fixed database roles' member.
- Allow CREATE schema in Babelfish GroupAD via fixed db roles' membership.
- Fixed an issue with object ownership. Any new object created by a user from TDS endpoint will now be owned by schema owner as opposed to previous behaviour where the current user always owned the new object.
- Added handling for default schema name for procedure in Group-AD session, when Table Valued Parameter is used as an argument of a procedure.

High Priority stability enhancements

- Fixed logic to adjust precision and scale in Numeric Multiplication and Division.
- Fixed computation of precision and scale for User defined types.
- Fixed computation of precision and scale for constant with value 0.
- Fixed the issue `wrong varnullingrels` error could be reported incorrectly after subquery transformation.
- Fixed the issue that alter table will cause follow up cascade drop command failed to drop the database contain this table.
- Fixed PIVOT operator to gracefully handle NULL entries in pivot column.
- Restrict dropping of Babelfish login via PG port, if a BBF login has mapped users in all three master, tempdb and msdb databases.
- Fixed permission denied error in Babelfish Group AD while using table variables in some scenarios.
- Fixed bug which prevented enable/disable all triggers on tables.
- Fixed incorrect conversion from integers to varbinary datatype.
- Fixed Casting and Conversion from Float to Varchar datatype.
- Fixed suser_sname() function to handle the null inputs.
- Fixed issue with result having incorrect scale in numeric/decimal addition and subtraction.
- Fixed issue which causes incorrect result in arithmetic operations which results in numeric/decimal type.
- Fixed an issue which caused communication link failure with DROP LOGIN/USER/ROLE [public].
- Restricted dropping of system procedures and views from dbo schema.
- Fixed an issue in round() function to ensure return types match input argument types.
- Transfer nullability and identity properties of columns in SELECT INTO statement to new table. These properties are only transferred if there is a single table in FROM clause of SELECT INTO and the column isn't part of expression in select into statements target list.

Additional improvements and enhancements

- Fixed JSON string formatting to prevent improper backslash escaping in “FOR JSON” output with json_query function.
- Fixed an issue where guest user could create objects in guest schema.

- Fixed PUBLIC role attributes in system views.
- Fixed sys.objects catalog to correctly populate unique constraints metadata.
- Fixed issue when max length of a RPC character based parameter is 0.
- Restricted members of fixed database role db_ddladmin from creating schema for database principals that it isn't a member of.
- Restricted members of fixed database role db_ddladmin from creating schema for database principals that it isn't a member of.
- Added an escape hatch for the INLINE option in CREATE FUNCTION statements, defaulting to “strict” mode for proper error handling.
- Fixed the entry in `babelfish_schema_permissions` which was getting overridden if there were table and procedure with the same name.
- Fixed an errors while fetching the object definition of tsql objects due to handling of few nodes in `sys.tsql_get_expr`.
- Fixed the logic for numeric/decimal datatype typmod resolution in outer/inner queries.
- Fixed some cases of object resolution inside stored procedures, functions and trigger.
- Fixed case expression when one of the branch is NUMERIC and other is of EXACT NUMERIC.
- Improved index name handling in Babelfish by preserving the original index name in the catalog, making it visible in catalog views like sys.indexes. It also adds support for renaming existing indexes using sp_rename to preserve and display their original names.
- Fixed a crash in `resolve_numeric_typmod_from_exp` for aggregate functions using *(all columns).

Babelfish for Aurora PostgreSQL 5.1

This release of Aurora Babelfish is provided with Aurora PostgreSQL 17.4. For more information about the improvements in Aurora PostgreSQL 17.4, see Amazon Aurora PostgreSQL updates. Babelfish for Aurora PostgreSQL 5.1 adds several new features, enhancements, and fixes. For more information about Babelfish for Aurora PostgreSQL, see Working with Babelfish for Aurora PostgreSQL.

Aurora Babelfish release 5.1.3, February 02, 2026

Critical stability enhancements

- Fixed crashes and intermittent errors caused by memory corruption when a parameter is assigned to itself.

Aurora Babelfish release 5.1.2, October 09, 2025

Critical stability enhancements

- Fixed an issue during TDS Reset Connection in certain situations.
- Fixed crash in `resolve_numeric_typmod_from_exp` for aggragate functions using *(all columns)

High priority stability enhancements

- Fixed a crash in queries using `FOR JSON AUTO` and `JSON PATH`.

Aurora Babelfish release 5.1.1, June 03, 2025

Security enhancements

- Fixed an issue with permission check in parallel worker where non-privileged user may get read access to data in some scenarios.

Critical stability enhancements

- Added support for larger server hello messages during SSL handshake.

Aurora Babelfish release 5.1.0, May 01, 2025

New Features

- Added support for fixed database-level roles `db_securityadmin`, `db_accessadmin`, `db_ddladmin`, `db_datareader` and `db_datawriter`. T-SQL users can be added to these fixed database roles.
- Added support for fixed server-level roles `securityadmin` and `dbcreator`. T-SQL logins can be added to these fixed server roles.
- Added support for adding T-SQL users to `db_owner` fixed database-level role. This T-SQL will have privileges similar to the database owner.

For more information about relevant permission management and access control settings for these new features in Babelfish, see Managing permissions and access control in Babelfish for Aurora PostgreSQL.

Critical enhancements

- Fixed issues with `Convert` function when converting from `string` to `date`, `datetimeoffset`, `datetime2`, `datetime`, `smalldatetime` and `time`.
- Fixed the issue of parameter declarations containing # characters not being handled correctly.
- Supported `SET IDENTITY_INSERT` for three part relation references.
- Fixed an issue with the `HASHBYTES` function to ensure correct behavior when processing `NVARCHAR` argument.
- Fixed the issue of `CREATE PARTITION SCHEME` not supporting "PRIMARY" syntax.
- Fixed the issue of UPDATE/DELETE of table variable query in a function getting incorrectly rejected with multi-table FROM clause.
- Restricted user defined @@function from being mapped to sys function.
- Fixed the issue of comparison with empty double quoted string raised the error about "zero-length delimited identifier".
- Fixed a crash which could occur in rare situations when using temporary tables with certain orphaned catalog entries.
- Fixed an issue where trigger gets dropped when dropping a column in a table.
- Improved performance of queries having join between `TABLE_CONSTRAINTS` and `KEY_COLUMN_USAGE` view in the INFORMATION_SCHEMA schema.
- Fixed inconsistent formatting issue with `Convert` function when converting MONEY datatype with value 0 to string datatypes.
- Fixed formatting issues in `CAST` from `MONEY` to `CHAR/VARCHAR`.
- Fixed the issue where `SELECT...INTO` with `MIN` and `MAX` aggregations on `MONEY` columns lost type information.
- Implement modulo operator for `MONEY` type.
- Added cleanup of stale parameters and configs in case of connection pooling.
- Added comprehensive cursor state cleanup to avoid stale data in case of connection pooling.
- Fixed a issue with `IDENTITY` columns not being recognized during `DML` statements using `OUTPUT` and `WHERE` clause.

High Priority stability enhancements

- Fixed an issue where @@function in `UPDATE SET` clause causes syntax error.
- Fixed dynamic evaluation of @local_var for `UPDATE ... SET` @local_var and `SELECT` command.
- Fixed an issue with `sp_columns_100` where partial data could be returned if @fUsePattern = 0 is used.
- Fixed an issue where local variables may not be updated correct when query involves manipulation of local variable.
- Improved the general performance of parsing.
- Fixed an issue with system function `OPENJSON`.
- Fixed the incorrect result datatype of `UNION` involving `MONEY` type.
- Fixed offset when using “AT TIME ZONE” with DATETIME2 datatype conversion with convert() function in non-default local timezone setting.
- Fixed an issue where batches containing cross database queries looks up the objects in incorrect database.
- Fixed behavior of `DATEDIFF`() and `DATEDIFF_BIG`() functions for week and quarter `Datepart`.
- Fixed an issue where `sys.column_property` may return incorrect results for ordinal property of a column.
- Fixed “`AT TIME ZONE`” issue near DST change time with `DATETIME2` datatype conversion.
- Fixed behavior of queries which use `sys.Db_id()`function which returned empty rows in enforced parallel mode.

Additional improvements and enhancements

- Optimize execution the `plan` extension by removing unnecessary `CAST` functions.
- `EXECUTE`() on a double-quoted string no longer raises an error.
- Fixed an error when using functions as column default values on temp tables.
- Fixed an error in `OPENJSON` function call to allow parse on long `JSON` string.
- Fixed issue where dropping member from role does not work after restoring Babelfish database.
- Fixed the alias issue when if exists co-exists with a “=” alias in select list.
- Restricted declaring the reserved @@function names as common variables.

- Corrected the implementation of procedure `sp_helpuser` for database roles where `sp_helpuser` should show roles only when explicitly specified.
- Fixed an issue where smalldatetime type and date type can more flexibly access data through index.
- Fixed an issue with system procedure `fn_listextendedproperty`.
- Fixed the use of table-valued parameters as arguments in procedures. Previously, you had to specify the type name of the table-valued parameter when calling the procedure, now it is optional.
- Fixed precision and scale when common type of `CASE` expression is `NUMERIC` / `DECIMAL` .
- Fixed an issue where `sys.dm_exec_sessions` may have abandoned entries for already terminated connections.
- Fixed an issue where a login with mapped database user still has guest user privileges.
- Fixed an issue where transaction count changes after execution of some system functions.
- Fixed issue where `Datepart` functions were having different output based on the GUC `timezone`.

Babelfish for Aurora PostgreSQL 4.x versions

Version updates

- Babelfish for Aurora PostgreSQL 4.10
- Babelfish for Aurora PostgreSQL 4.9
- Babelfish for Aurora PostgreSQL 4.8
- Babelfish for Aurora PostgreSQL 4.7
- Babelfish for Aurora PostgreSQL 4.6
- Babelfish for Aurora PostgreSQL 4.5
- Babelfish for Aurora PostgreSQL 4.4
- Babelfish for Aurora PostgreSQL 4.3
- Babelfish for Aurora PostgreSQL 4.2
- Babelfish for Aurora PostgreSQL 4.1
- Babelfish for Aurora PostgreSQL 4.0

Babelfish for Aurora PostgreSQL 4.10

This release of Aurora Babelfish is provided with Aurora PostgreSQL 16.14. For more information about the improvements in Aurora PostgreSQL 16.14, see Amazon Aurora PostgreSQL updates. Babelfish for Aurora PostgreSQL 4.10 adds several new features, enhancements, and fixes. For more information about Babelfish for Aurora PostgreSQL, see Working with Babelfish for Aurora PostgreSQL.

Aurora Babelfish release 4.10.0, August 21, 2026

New Features

- Babelfish now extends support for Shared Plan Cache to T-SQL queries.

Critical enhancements

- Fixed an issue that could cause crash in SPI_finish after Out Of Memory error.
- Fixed crash in FOR XML PATH queries when processing all-NULL rows without a root element.
- Improved query performance when expanding the views and procedures in SSMS Object Explorer.

High Priority stability enhancements

- Fixed an issue where queries with local variables could return inconsistent results when using generic query plans.
- Fixed an issue where creating a function or procedure in a schema created from the PostgreSQL endpoint could cause a database reboot.

Additional improvements and enhancements

- Improved memory handling in FOR XML query processing.
- Fixed an issue where sp_execute returned an error when invoked with named parameters.
- Fixed DATETIME2FROMPARTS function to properly handle fractional second values in the range 32786 to 9999999.
- Improved memory handling in PrepareRowDescription and rewrite_if_condition functions.
- Fixed Memory management issue in IsTopTransactionName function.

- Fixed allocation of savepoint_name in correct memory context in pltsql_eval_txn_data.

Babelfish for Aurora PostgreSQL 4.9

This release of Aurora Babelfish is provided with Aurora PostgreSQL 16.13. For more information about the improvements in Aurora PostgreSQL 16.13, see Amazon Aurora PostgreSQL updates. Babelfish for Aurora PostgreSQL 4.9 adds several new features, enhancements, and fixes. For more information about Babelfish for Aurora PostgreSQL, see Working with Babelfish for Aurora PostgreSQL.

Aurora Babelfish release 4.9.0, April 6, 2026

New Features

- Added support for implicit cast from (n)varchar/(n)char to datetimeoffset datatype.
- Added support for sys.fn_varbintohexstr system object.

Critical enhancements

- Fixed an issue where executing queries from PostgreSQL endpoint in Active Directory Authentication enabled instances may lead to a reboot.
- Fixed an issue where update with output clause may skip rows during concurrent updates.
- DROP LOGIN now correctly returns an error when attempting to drop a login that is the owner of a database.

High Priority stability enhancements

- Fixed incorrect return datatype in UNION queries involving datetimeoffset, (n)varchar and datetime types.
- Fixed issue in coalesce involving datetimeoffset and (n)varchar types.
- Fixed UNION and CASE expressions with varbinary and string literals to correctly resolve to varchar instead of varbinary.
- Restricted ownership change of Babelfish objects from PG port.
- Fixed an issue in procedure calls leading to incorrect lifecycle handling of temp tables.
- Restricted users from altering Babelfish objects in sys schema.

- Fixed the scale/precision handling for MIN/MAX functions on CHAR/NCHAR datatypes.
- Blocked ALTER AUTHORIZATION on database when the new owner is a database role, fixed server role, or sysadmin.
- Fixed high CPU utilization during concurrent connection establishment for pyODBC connections.

Additional improvements and enhancements

- Fixed an issue where casting string values to sqlvariant may cause client to hang.
- Fixed cast and convert functions between datatypes (n)char & (var)binary.
- Added fix to handle UDT datatypes in DATEADD() function.
- Fixed handling for white space characters in the ISNUMERIC() function to match T-SQL behavior.
- Fixed an issue in SELECT queries with reserved keywords used as column aliases.
- Fixed output format when casting datetime and smalldatetime to (n)varchar/(n)char.
- Fixed handling of scale/precision for empty string casting to binary.
- Fixed concatenation of binaries to produce expected results.
- Fixed scale/precision handling for concatenated results of binaries.
- Fixed a rare issue where parallel query runs into unexpected error when table OID reaches to certain limit.
- Fixed an issue where MONEY type conversion incorrectly rejected few valid ASCII and special characters.
- Fixed convert function to properly apply style parameter when converting SMALLMONEY to string types, ensuring correct formatting for styles 0, 1, 2, and 126 matching with T-SQL behavior.
- Fixed trailing blanks being incorrectly treated as insignificant in LIKE operator in case of exact pattern matching.
- Fixed multiple convert function issues for MONEY/SMALLMONEY type to string conversions, including proper handling of negative style parameters and invalid style value.

Babelfish for Aurora PostgreSQL 4.8

This release of Aurora Babelfish is provided with Aurora PostgreSQL 16.11. For more information about the improvements in Aurora PostgreSQL 16.11, see Amazon Aurora PostgreSQL updates. Babelfish for Aurora PostgreSQL 4.8 adds several new features, enhancements, and fixes. For

more information about Babelfish for Aurora PostgreSQL, see Working with Babelfish for Aurora PostgreSQL.

Aurora Babelfish release 4.8.2, March 20, 2026

Critical stability enhancements

- Fixed an issue where executing queries from PostgreSQL endpoint in Active Directory Authentication enabled instances may lead to a reboot.

High Priority stability enhancements

- Fixed an issue in nested procedure calls that caused temp table cleanup failures and parser errors.

Aurora Babelfish release 4.8.1, January 16, 2026

Critical stability enhancements

- Fixed an issue where an UPDATE statement with OUTPUT clause may skip rows when there are concurrent updates on the same row.

Aurora Babelfish release 4.8.0, December 18, 2025

New Features

- Enabled support of SELECT TOP N PERCENT clause with few limitations.
- Enabled support of sys.time_zone_info view.
- Enabled support for Values clause and subquery columns in SELECT list in FOR JSON AUTO functionality.

Critical enhancements

- Fixed STPointFromText() and Point() to throw error on NULL arguments.
- Fixed issues with Geometry/Geography to (var)char and (var)binary conversions.
- Fixed function definition of STPointFromText(), STPointFromText(), STAsText() and STAsBinary().
- Fixed bytea to Geometry/Geography conversion for Point instance.

- Fixed handling of STPointFromText, STGeomFromText, STLineFromText for incorrect binary input.
- ASCII function returns incorrect results with argument type as Binary and Varbinary.
- Active snapshots when system catalogs are being updated while ResetTempTableNamespace in TDS.
- Fixed crashes and intermittent errors caused by memory corruption when a parameter is assigned to itself.

High Priority stability enhancements

- Fixed an issue where user can not be dropped when permissions have been granted to that user.
- Added support for the planner to choose index scan for queries having predicates comparing numeric and money/smallmoney data types.
- Fixed precision/scale for Round() function.
- Fixed an issue where rollback to savepoint in some cases failed to send the correct transaction state token to the client, causing subsequent operations in the transaction to fail.
- Fixed an issue where errors in pg_cron job was leading to server reboot.

Additional improvements and enhancements

- Fixed an issue to allow concurrent UPDATE operations with OUTPUT clauses.
- Fixed an issue which resets the escape hatch settings to default with the first temp table creation.
- Fixed Datetime and Varbinary to Binary CAST functions.
- Fixed an issue to match CONVERT and CAST function return values for Binary type.
- Fixed INSERT INTO table DEFAULT VALUES for domain types, by setting appropriate function return type.
- Fixed an issue where running multi-Statement table valued function throws syntax error if the database name contains a symbol for an operator.
- Fixed REVOKE permission execution to correctly handle overlapping schema-level and object-level grants.
- Enabled support for the NULL/NOT NULL syntax in ALTER TABLE ALTER COLUMN statements.
- Add identifier delimiters to handle special characters in login and role names.

- Fixed indexes that were created on top of T-SQL temporary tables to correctly follow transaction semantics.
- Fixed various mathematical functions for Money and smallmoney datatype.
- Fixed an issue to persist column level permissions when modifying views using ALTER VIEW.
- Enabled support to allow alter on functions with dependent weak schemabinding views.
- Fixed issue with Geometry/Geography static methods when using delimited identifiers for data types.
- Fixed return type of SQRT() function to float.
- Fixed issues with assignment of multibyte characters to local variable of type nchar/nvarchar.
- Added empty string handling in ISNUMERIC(), to ensure compatibility with T-SQL behavior.
- Fixed DATALENGTH() to return correct byte length value for various datatypes and their UDTs.
- Fixed DATETIME to VARBINARY CAST function.
- Fixed precision/scale in SELECT INTO while using with GROUP BY clause.
- Fixed an issue of protocol error in TDS stream due to Numeric/Decimal overflow.
- Fixed issues with CTE logic and missing intermediate levels in the output of FOR JSON AUTO clause.
- Fixed an issue related to LIKE operator where ESCAPE character does not work as expected when ESCAPE character comes after wildcard in pattern.
- Fixed an issue which occurs when parameter of type binary(8) passed from .NET driver.

Babelfish for Aurora PostgreSQL 4.7

This release of Aurora Babelfish is provided with Aurora PostgreSQL 16.10. For more information about the improvements in Aurora PostgreSQL 16.10, see Amazon Aurora PostgreSQL updates. Babelfish for Aurora PostgreSQL 4.7 adds several new features, enhancements, and fixes. For more information about Babelfish for Aurora PostgreSQL, see Working with Babelfish for Aurora PostgreSQL.

Releases

- Aurora Babelfish release 4.7.2, May 07, 2026
- Aurora Babelfish release 4.7.1, November 25, 2025
- Aurora Babelfish release 4.7.0, November 25, 2025

Aurora Babelfish release 4.7.2, May 07, 2026

Critical stability enhancements

- Fixed an issue where executing queries from PostgreSQL endpoint in Active Directory Authentication enabled instances may lead to a reboot.

Aurora Babelfish release 4.7.1, November 25, 2025

Critical stability enhancements

- Fixed crashes and intermittent errors caused by memory corruption when a parameter is assigned to itself.

Aurora Babelfish release 4.7.0, November 25, 2025

New Features

- Added support for Z-M flags for Point Instances and Z, M, HasZ and HasM functions for GEOMETRY and GEOGRAPHY datatypes.
- Added support for sp_helplogins stored procedure.
- Enabled Support for weak binding views with few limitations.

Critical enhancements

- Fixed an issue during TDS Reset Connection in certain situations.
- Fixed an issue in GroupAD where login with mapped user should not have access to guest privileges.
- Improved the performance of queries using the ISNUMERIC() function in predicates.
- Added support for queries to choose index scan for queries having predicates comparing numeric and integer data types.

High Priority stability enhancements

- Fixed overflow checks in all arithmetic operations with money, smallmoney being a higher precedence operand.

- Fixed the output datatype for all arithmetic operations involving smallmoney and bit.
- Fixed behavior of certain math functions like CEIL, ROUND, POWER and FLOOR for money and smallmoney data types.
- Fixed issue with connection crash during arithmetic operations on smallmoney and int.
- Fixed overflow checks in all arithmetic/numeric operations with smallmoney/money being a operand.
- Fixed an issue with DATENAME() to gives correct value of TZOFFSET part.
- Handling for CHAR()/NCHAR() function to return NULL instead of errors when values are out of range.
- Handling for NCHAR() function to accept inputs that can be converted to integers.
- Fixed PATINDEX() function to correctly finds patterns at the end of text and handles wildcard searches accurately.
- To use Index for Accent Sensitive collation for LIKE operator when the pattern is EXACT or PREFIX or INFIX match, user needs to create index from TSQL endpoint : CREATE INDEX <index_name> ON <table_name>(<column_name>). To use Index for Accent Insensitive collation for LIKE operator when the pattern is EXACT or PREFIX or INFIX match, user needs to create index from PSQL endpoint: CREATE INDEX <index_name> ON <schema_name>.<table_name>(sys.remove_accents_internal_using_cache(<column_name>)).
- Fixed an issue where TRY_CAST and TRY_CONVERT was incorrectly rounding decimal values when casting to integer types, instead of truncating the fractional part.
- Fixed precision and scale for arithmetic operations between money/smallmoney and numeric and for money/smallmoney in union operators.
- Fixed precision and scale handling for case expressions and nested case expressions when with numeric and smallmoney/money branches.
- Fixed precision and scale handling for numeric expressions with sub-expressions as money/smallmoney or fixed length datatypes.
- Fixed an issue with handling of bigint and money/smallmoney multiplication operations.
- Fixed an issue where money/smallmoney multiplications was incorrectly truncating decimal values in result, insetad of rounding the fractional part.
- Fixed precision and scale handling for nested case expressions with numeric and money/smallmoney as their branches.
- Fixed precision and scale handling for SUM()/AVG() functions with money/smallmoney and fixed length datatypes.

- Fixed an issue with airthetic operations between numeric variable and fixed length variables.
- Fixed precision and scale handling for aggregate functions with numeric.
- Fixed an issue with babelfish connections restored during ZDP.
- Fixed an issue with RESET ALL command from postgres endpoint.
- Fixed an issue with response packets when reading large nvarchar(max) data, which could cause ArgumentOutOfRangeException with .NET driver.
- Fixed an issue where parallelism won't be used for pltsql RETURN expression.
- Fixed permission denied issue in cross-db table valued functions.
- Added Handling for empty input string handling in date and time datatypes.
- Fixed precision and scale handling for money/smallmoney while creating objects,casts,variables and user defined datatypes using it.
- Fixed an issue to preserve Timezone information during casting from string to datetimeoffset.
- Fixed Function QUOTENAME() to return correct strings.
- Added handling of binary arguments for Len() function.
- Fixed the precision and scale for aggregate function that have *(all columns) as input.
- Fixed an issue for CaseExpr with numeric computation.
- Fixed a crash in queries using 'FOR JSON AUTO' and 'JSON PATH'.
- Fixed rounding off issue during storing datetime datatype. Existing users should run the following query from TSQL endpoint to update their existing data: UPDATE <table_name> SET <datetime_col> = CAST(CAST(<datetime_col> as VARCHAR) AS DATETIME).
- Fixed datetime comparison in Babelfish to match TSQL behavior of treating datetime values within 0.00333 second precision as equal.

Additional improvements and enhancements

- Fixed an issue with OBJECT_DEFINITION function where it was trucating the output after 4000 characters.
- Fixed the database_principals view to display the correct SID.
- Handle PostgreSQL reserved keywords in Cursor operations.
- Add full support for sys.server_permissions, sys.sql_logins views and sys.fn_varbintohexsubstring system function.
- Fixed an issue while adding a column with default value which resulted in an error.

- Fixed an issue with INSERT ... EXECUTE statements in stored procedures related to nested levels.

Babelfish for Aurora PostgreSQL 4.6

This release of Aurora Babelfish is provided with Aurora PostgreSQL 16.9. For more information about the improvements in Aurora PostgreSQL 16.9, see Amazon Aurora PostgreSQL updates. Babelfish for Aurora PostgreSQL 4.6 adds several new features, enhancements, and fixes. For more information about Babelfish for Aurora PostgreSQL, see Working with Babelfish for Aurora PostgreSQL.

Releases

- Aurora Babelfish release 4.6.2, January 15, 2026
- Aurora Babelfish release 4.6.1, August 08, 2025
- Aurora Babelfish release 4.6.0, June 30, 2025

Aurora Babelfish release 4.6.2, January 15, 2026

Critical stability enhancements

- Fixed crashes and intermittent errors caused by memory corruption when a parameter is assigned to itself.

Aurora Babelfish release 4.6.1, August 08, 2025

Critical stability enhancements

- Fixed an issue during TDS Reset Connection in certain situations.

High priority stability enhancements

- Fixed a crash in queries using `FOR JSON AUTO` and `JSON PATH`.
- Fixed an issue with babelfish connections restored during ZDP.

Aurora Babelfish release 4.6.0, June 30, 2025

New Features

- Added CREATE OR ALTER VIEW / ALTER VIEW syntax support in Babelfish with few limitations.
- Added support of Transact-SQL UNPIVOT operators for Babelfish.
- Added support for `STDimension`, `STDisjoint`, `STIntersects`, `STIsClosed`, `STIsEmpty`, `STIsValid` Geospatial functions.
- Added support for collation in partition functions and partitioning columns.
- Enabled support for scripting logins in SSMS for Babelfish.

Critical enhancements

- Added "+" and "-" operator for varbinary.
- Added new GUCs `babelfishpg_tsql.apg_enable_correlated_scalar_transform` and `babelfishpg_tsql.apg_enable_subquery_cache` to control subquery optimization features in Babelfish. The new GUCs are ON by default.
- Added support for larger server hello messages during SSL handshake by segmenting them into 4096 byte packets.
- Added support for CAST from VARBINARY to DATETIME in Babelfish.
- Added support for altering user/role in Babelfish GroupAD for fixed database roles' member.
- Allow CREATE schema in Babelfish GroupAD via fixed db roles' membership.
- Fixed an issue with object ownership. Any new object created by a user from TDS endpoint will now be owned by schema owner as opposed to previous behaviour where the current user always owned the new object.
- Added handling for default schema name for procedure in Group-AD session, when Table Valued Parameter is used as an argument of a procedure.

High Priority stability enhancements

- Fixed logic to adjust precision and scale in Numeric Multiplication and Division.
- Fixed computation of precision and scale for User defined types.
- Fixed computation of precision and scale for constant with value 0.
- Fixed the issue `wrong varnullingrels` error could be reported incorrectly after subquery transformation.
- Fixed the issue that alter table will cause follow up cacade drop cmd failed to drop the database contain this table.

- Fixed PIVOT operator to gracefully handle NULL entries in pivot column.
- Restrict dropping of Babelfish login via PG port, if a BBF login has mapped users in all three master, tempdb and msdb databases.
- Fixed permission denied error in Babelfish Group AD while using table variables in some scenarios.
- Fixed bug which prevented enable/disable all triggers on tables.
- Fixed incorrect conversion from integers to varbinary datatype.
- Fixed Casting and Conversion from Float to Varchar datatype.
- Fixed suser_sname() function to handle the null inputs.
- Fixed issue with result having incorrect scale in numeric/decimal addition and subtraction.
- Fixed issue which causes incorrect result in arithmetic operations which results in numeric/decimal type.
- Fixed an issue which caused communication link failure with DROP LOGIN/USER/ROLE [public].
- Restricted dropping of system procedures and views from dbo schema.
- Fixed an issue in round() function to ensure return types match input argument types.
- Transfer nullability and identity properties of columns in SELECT INTO statement to new table. These properties are only transferred if there is a single table in FROM clause of SELECT INTO and the column isn't part of expression in select into statements target list.

Additional improvements and enhancements

- Fixed JSON string formatting to prevent improper backslash escaping in “FOR JSON” output with json_query function.
- Fixed CONVERT function to allow empty string values to be converted to `datetime` format.
- Fixed an issue where guest user could create objects in guest schema.
- Fixed PUBLIC role attributes in system views.
- Fixed sys.objects catalog to correctly populate unique constraints metadata.
- Fixed issue when max length of a RPC character based parameter is 0.
- Restricted members of fixed database role db_ddladmin from creating schema for database principals that it isn't a member of.
- Restricted members of fixed database role db_ddladmin from creating schema for database principals that it isn't a member of.

- Added an escape hatch for the INLINE option in CREATE FUNCTION statements, defaulting to “strict” mode for proper error handling.
- Fixed the entry in `babelfish_schema_permissions` which was getting overridden if there were table and procedure with the same name.
- Fixed an errors while fetching the object definition of tsql objects due to handling of few nodes in `sys.tsql_get_expr`.
- Fixed the logic for numeric/decimal datatype typmod resolution in outer/inner queries.
- Fixed some cases of object resolution inside stored procedures, functions and trigger.
- Fixed case expression when one of the branch is NUMERIC and other is of EXACT NUMERIC.
- Improved index name handling in Babelfish by preserving the original index name in the catalog, making it visible in catalog views like sys.indexes. It also adds support for renaming existing indexes using sp_rename to preserve and display their original names.
- Fixed a crash in resolve_numeric_typmod_from_exp for aggragate functions using *(all columns).

Babelfish for Aurora PostgreSQL 4.5

This release of Aurora Babelfish is provided with Aurora PostgreSQL 16.8. For more information about the improvements in Aurora PostgreSQL 16.8, see Amazon Aurora PostgreSQL updates. Babelfish for Aurora PostgreSQL 4.5 adds several new features, enhancements, and fixes. For more information about Babelfish for Aurora PostgreSQL, see Working with Babelfish for Aurora PostgreSQL.

Releases

- Aurora Babelfish release 4.5.3, February 02, 2026
- Aurora Babelfish release 4.5.2, October 09, 2025
- Aurora Babelfish release 4.5.1, June 03, 2025
- Aurora Babelfish release 4.5.0, April 08, 2025

Aurora Babelfish release 4.5.3, February 02, 2026

Critical stability enhancements

- Fixed crashes and intermittent errors caused by memory corruption when a parameter is assigned to itself.

Aurora Babelfish release 4.5.2, October 09, 2025

Critical stability enhancements

- Fixed an issue during TDS Reset Connection in certain situations.
- Fixed crash in `resolve_numeric_typmod_from_exp` for aggragate functions using *(all columns)

High priority stability enhancements

- Fixed a crash in queries using `FOR JSON AUTO` and `JSON PATH`.

Aurora Babelfish release 4.5.1, June 03, 2025

Security enhancements

- Fixed an issue with permission check in parallel worker where non-privileged user may get read access to data in some scenarios.

Critical stability enhancements

- Added support for larger server hello messages during SSL handshake.

Aurora Babelfish release 4.5.0, April 08, 2025

New Features

- Added support for fixed database-level roles `db_securityadmin`, `db_accessadmin`, `db_ddladmin`, `db_datareader` and `db_datawriter`. T-SQL users can be added to these fixed database roles.
- Added support for fixed server-level roles `securityadmin` and `dbcreator`. T-SQL logins can be added to these fixed server roles.
- Added support for adding T-SQL users to `db_owner` fixed database-level role. This T-SQL will have privileges similar to the database owner.

For more information about relevant permission management and access control settings for these new features in Babelfish, see Managing permissions and access control in Babelfish for Aurora PostgreSQL.

Critical enhancements

- Fixed the issue of parameter declarations containing # characters not being handled correctly.
- Supported `SET IDENTITY_INSERT` for three part relation references.
- Fixed an issue with the `HASHBYTES` function to ensure correct behavior when processing `NVARCHAR` argument.
- Fixed the issue of `CREATE PARTITION SCHEME` not supporting “PRIMARY” syntax.
- Fixed the issue of UPDATE/DELETE of table variable query in a function getting incorrectly rejected with multi-table FROM clause.
- Restricted user defined @@function from being mapped to sys function.
- Fixed the issue of comparison with empty double quoted string raised the error about “zero-length delimited identifier”.
- Fixed a crash which could occur in rare situations when using temporary tables with certain orphaned catalog entries.
- Fixed an issue where trigger gets dropped when dropping a column in a table.
- Improved performance of queries having join between `TABLE_CONSTRAINTS` and `KEY_COLUMN_USAGE` view in the INFORMATION_SCHEMA schema.
- Fixed inconsistent formatting issue with `Convert` function when converting MONEY datatype with value 0 to string datatypes.
- Fixed formatting issues in `CAST` from `MONEY` to `CHAR/VARCHAR`.
- Fixed the issue where `SELECT...INTO` with `MIN` and `MAX` aggregations on `MONEY` columns lost type information.
- Implement modulo operator for `MONEY` type.
- Added Cleanup of stale parameters and configs in case of connection pooling.
- Added comprehensive cursor state cleanup to avoid stale data in case of connection pooling.
- Fixed a issue with `IDENTITY` columns not being recognized during `DML` statements using `OUTPUT` and `WHERE` clause.

High Priority stability enhancements

- Fixed an issue where @@function in UPDATE SET clause causes syntax error.
- Fixed dynamic evaluation of @local_var for UPDATE ... SET @local_var and SELECT command.
- Fixed an issue with sp_columns_100 where partial data could be returned if @fUsePattern = 0 is used.
- Fixed an issue where local variables may not be updated correct when query involves manipulation of local variable.
- Improved the general performance of antlr parsing.
- Fixed an issue with system function OPENJSON.
- Fixed the incorrect result datatype of UNION involving MONEY type.
- Fixed offset when using "AT TIME ZONE" with DATETIME2 datatype conversion with convert() function in non-default local timezone setting.
- Improved string functions to handle a wider range of datatypes.
- Fixed an issue where batches containing cross database queries looks up the objects in incorrect database.
- Fixed behavior of DATEDIFF() and DATEDIFF_BIG() functions for week and quarter Datepart.
- Fixed an issue where sys.column_property may return incorrect results for ordinal property of a column.
- Fixed "AT TIME ZONE" issue near DST change time with DATETIME2 datatype conversion.
- Fixed behavior of queries which use sys.Db_id() function which returned empty rows in enforced parallel mode.

Additional improvements and enhancements

- Optimize execution the plan extension by removing unnecessary CAST functions.
- EXECUTE() on a double-quoted string no longer raises an error.
- Fixed an error when using functions as column default values on temp tables.
- Fixed an error in OPENJSON function call to allow parse on long JSON string.
- Fixed issue where dropping member from role does not work after restoring Babelfish database.
- Fixed the alias issue when if exists co-exists with a "=" alias in select list.
- Restricted declaring the reserved @@function names as common variables.

- Corrected the implementation of procedure `sp_helpuser` for database roles where `sp_helpuser` should show roles only when explicitly specified.
- Fixed an issue where smalldatetime type and date type can more flexibly access data through index.
- Fixed an issue with system procedure `fn_listextendedproperty`.
- Fixed the use of table-valued parameters as arguments in procedures. Previously, you had to specify the type name of the table-valued parameter when calling the procedure, now it is optional.
- Fixed precision and scale when common type of `CASE` expression is `NUMERIC` / `DECIMAL` .
- Fixed an issue where `sys.dm_exec_sessions` may have abandoned entries for already terminated connections.
- Fixed an issue where a login with mapped database user still has guest user privileges.
- Fixed an issue where transaction count changes after execution of some system functions.
- Fixed issue where `Datepart` functions were having different output based on the GUC `timezone`.

Babelfish for Aurora PostgreSQL 4.4

This release of Aurora Babelfish is provided with Aurora PostgreSQL 16.6. For more information about the improvements in Aurora PostgreSQL 16.6, see Amazon Aurora PostgreSQL updates. Babelfish for Aurora PostgreSQL 4.4 adds several new features, enhancements, and fixes. For more information about Babelfish for Aurora PostgreSQL, see Working with Babelfish for Aurora PostgreSQL.

Releases

- Aurora Babelfish release 4.4.3, November 13, 2025
- Aurora Babelfish release 4.4.2, June 24, 2025
- Aurora Babelfish release 4.4.1, January 20, 2025
- Aurora Babelfish release 4.4.0, December 27, 2024

Aurora Babelfish release 4.4.3, November 13, 2025

Critical stability enhancements

- Fixed an issue during TDS Reset Connection in certain situations.

High priority stability enhancements

- Fixed a crash in queries using `FOR JSON AUTO` and `JSON PATH`.

Aurora Babelfish release 4.4.2, June 24, 2025

Security enhancements

- Fixed an issue with permission check in parallel worker where non-privileged user may get read access to data in some scenarios.

Aurora Babelfish release 4.4.1, January 20, 2025

High priority stability enhancements

- Fixed an issue where transactional commands may terminate the connection in some cases.

Aurora Babelfish release 4.4.0, December 27, 2024

New features

- Added support for `ALTER FUNCTION` syntax.
- Added support for view usage for `PIVOT` operator .
- Added `pgaudit` extension support with Babelfish.
- Added support of XML method `.EXIST()` for XML Datatypes.
- Enabled support of Geospatial data types in data migration via DMS for Babelfish under PostgreSQL endpoint.
- Enabled user to create database with specific collations. For more information, see Collation supported at database level in Babelfish.
- Enabled support of `sys.sp_reset_connection` stored procedure to reset connection.
- Enabled cross-database references of objects (tables/views/functions) in views.
- Enabled support of `sys.dm_os_sys_info` view to provides information about the instance like `server_start_time` and `ms_ticks`.

- Enabled support of user connection and network packet size information in `sys.configurations` view.
- Enabled support of correlated subquery transformation for more scenarios. For more information, refer to Limitations section in Improving Babelfish query performance using subquery transformation .

High priority stability enhancements

- Fixed date functions to take into account the timezone setting.
- Improved error handling behavior for `relation does not exist` and `column does not exist` errors.
- Fixed `sp_tables` stored procedure to correctly handle three-part object names across databases to retrieve correct database name during linked servers usage.
- Fixed an issue to enable database owner login to explore database objects in SSMS.
- Fixed `sp_tables` stored procedure to return correct result when @table_name parameter has square brackets around underscore (_).
- Fixed an issue where individual login active directory authentication used to throw error of pg_ad_mapping the `plugin` extension pointer not initialized.
- Fixed an issue where index creation could fail if the table is created using SELECT INTO syntax.
- Fixed an permission issue with cross-database function calls.
- Enabled Grant on schema to takes effect correctly on future objects created in that schema by any of the schema's authorized users.
- Fixed an issue to pick correct collation for prepared statements.
- Fixed an issue to have foreign key constraint check work correctly when column is created using non-default collation.
- Enabled the bcp queries to run with the `pgaudit` extension enabled.
- Fixed an issue to insert correct value in the table having identity column.
- Fixed an issue to have correct identity sequence value when bcp / SqlBulkCopy / insert bulk are used with `keep identity values` mode.

Additional improvements and enhancements

- Fixed the issue with Kill command which still left few sessions running after the command.

- Fixed the issue of `sys.identity_columns` view was wrongly returning more entries than it should.
- Fixed the issue of CASE statement and MIN/MAX functions related to error of string size not being defined or using explicit cast.
- Fixed an issue with `ISNUMERIC` function to return correct result for nvarchar/varchar parameters.
- Fixed the issue of CASE statement not working correctly when branch expression is of NVARCHAR type.
- Fixed behavior of CONCAT() and CONCAT_WS() functions for multibyte characters and to work with atleast 2 and 3 arguments respectively.
- Fixed an issue to allow ALTER COLUMN with type char for Temp Table.
- Fixed an issue in CONVERT function to make it work consistently with BINARY and VARBINARY types in Babelfish.
- Fixed the issue of inconsistent output from select query with FOR XML PATH clause.
- Fixed an issue to rethrow correct TSQL error code.
- Fixed behaviour of STRING_AGG() function for input containing multibyte characters.
- Fixed an issue where wrong overloaded variant of regexp_replace is called during restore.
- Fixed cast from sys.varchar to TIME type.
- Enabled use of nvarchar(max) as output parameter in procedure.
- Fixed an issue of missing brackets while declaring the variables in the definition of procedure.

Babelfish for Aurora PostgreSQL 4.3

This release of Aurora Babelfish is provided with Aurora PostgreSQL 16.4. For more information about the improvements in Aurora PostgreSQL 16.4, see Amazon Aurora PostgreSQL updates. Babelfish for Aurora PostgreSQL 4.3 adds several new features, enhancements, and fixes. For more information about Babelfish for Aurora PostgreSQL, see Working with Babelfish for Aurora PostgreSQL.

Releases

- Aurora Babelfish release 4.3.3, November 21, 2025
- Aurora Babelfish release 4.3.2, July 11, 2025
- Aurora Babelfish release 4.3.1, January 02, 2025

- Aurora Babelfish release 4.3.0, September 30, 2024

Aurora Babelfish release 4.3.3, November 21, 2025

High priority stability enhancements

- Fixed a crash in queries using `FOR JSON AUTO` and `JSON PATH`.

Aurora Babelfish release 4.3.2, July 11, 2025

Security enhancements

- Fixed an issue with permission check in parallel worker where non-privileged user may get read access to data in some scenarios.

Aurora Babelfish release 4.3.1, January 02, 2025

High priority stability enhancements

- Fixed an issue where individual login active directory authentication used to throw error of `pg_ad_mapping` the `plugin` extension pointer not initialized.
- Fixed an issue for date functions to allow them to take into account the local/session timezone setting.

Additional improvements and enhancements

- Fixed an issue where reserved keyword `PRIMARY` caused syntax errors when used as a column name or alias in DML and DDL statements.

Aurora Babelfish release 4.3.0, September 30, 2024

New Features

- Added support for Partitioning in Babelfish. For more information, see Understanding partitioning in Babelfish.
- Support system functions `CHARINDEX()`, `PATINDEX()` and `REPLACE()` for Babelfish non deterministic collations.

- Enabling support for `STContains`, `STEquals`, `STArea` the `PostGIS` extension functions for geospatial datatypes.

Security enhancements

- Fixed an issue that potentially allowed non-privileged users to drop other users and roles in some scenarios.
- Fixed an issue with `sys.database_principals` view where it was showing metadata related to all the users irrespective of privileges of server principal.

High Priority stability enhancements

- Fixed an issue with information_schema.tables returning incorrect table_name.
- Fixed an issue where less than operator gives incorrect results for binary data types.
- Fixed inconsistency with OIDs of triggers in `OBJECT_ID()` function and `sys.objects` view.
- Fixed an issue for the `plpgsql` extension function. The function's local settings for run-time configuration variables may not be reset at the end of function execution when Babelfish is installed.

Additional improvements and enhancements

- Fixed behavior of `TRIM()`, `LTRIM()`, `RTRIM()`, `LEFT()`, and `RIGHT()` functions for input containing multibyte characters, by returning result with appropriate datatype based on argument datatype.
- Improved performance of like operator with non deterministic collations.
- Fixed an issue where search patch may be incorrect when database name and/or schema name contains special characters in quotes.
- Fixed difference in behavior in Babelfish and TSQL for `UPPER()` and `LOWER()` functions with multibyte characters and appropriate argument and return types.
- Added Support of `WITH RECOMPILE` for Transact-SQL stored procedures and for ALTER PROCEDURE clause.
- The `sp_tables` procedure now allows you to use the `%` wildcard character in the `@table_qualifier` parameter. This makes it easier to search for tables by matching patterns in the table names.

- Fixed difference in behavior in Babelfish and TSQL for `STUFF()` , `SUBSTRING()` and `TRANSLATE()` functions with multibyte characters and appropriate argument and return types.
- Updated error message for `GRANT`, `REVOKE`, `DENY` statements.
- Fixed behavior of `REVERSE()`, `REPLACE()`, and `REPLICATE()` functions for input containing multibyte characters, by returning result with appropriate datatype based on argument datatype.
- Fixed output of `SPACE()` function for non-positve input argument.
- Improved memory handling when using BCP on a table with indexes.
- Fixed an issue where DML with `OUTPUT INTO` clause fired a trigger and may result in error.
- Fixed a data type resolve issue with union clause.
- Fixed an error message for `SUBSTRING()` function when the number of arguments are not appropriate.
- Fixed an issue when comment comes with the column name.
- Fixed an issue with `sys.server_principals` view to show `public` role entry.
- Added support for `WITHIN GROUP` clause for `STRING_AGG()` function.
- Fixed DDL export issue for database with SSMS.
- Added support for new vector extensions like `halfvec` and sparsevec which got introduced in version 0.7 of pgvector.
- Added support to show windows group membership in T-SQL function `IS_MEMBER()`.

Babelfish for Aurora PostgreSQL 4.2

This release of Aurora Babelfish is provided with Aurora PostgreSQL 16.3. For more information about the improvements in Aurora PostgreSQL 16.3, see Amazon Aurora PostgreSQL updates. Babelfish for Aurora PostgreSQL 4.2 adds several new features, enhancements, and fixes. For more information about Babelfish for Aurora PostgreSQL, see Working with Babelfish for Aurora PostgreSQL.

Releases

- Aurora Babelfish release 4.2.3, July 17, 2025
- Aurora Babelfish release 4.2.2, January 23, 2025
- Aurora Babelfish release 4.2.1, September 27, 2024

- Aurora Babelfish release 4.2.0, August 8, 2024

Aurora Babelfish release 4.2.3, July 17, 2025

Security enhancements

- Fixed an issue with permission check in parallel worker where non-privileged user may get read access to data in some scenarios.

Aurora Babelfish release 4.2.2, January 23, 2025

High priority stability enhancements

- Fixed an issue where individual login active directory authentication used to throw error of pg_ad_mapping the `plugin` extension pointer not initialized.
- Fixed an issue for date functions to allow them to take into account the local/session timezone setting.

Aurora Babelfish release 4.2.1, September 27, 2024

Security enhancements

- Fixed an issue with dropping users and roles by non-privileged user.

Aurora Babelfish release 4.2.0, August 8, 2024

New features

- Introduced support for PostgreSQL native logical replication so that users can replicate and synchronize individual tables from a source to one or more recipients using a publisher and subscriber model.
- Added support for Blue/Green deployments with Babelfish. You can now use Amazon RDS Blue/Green Deployments, to make and test database changes before implementing them in a production environment. For more information, see Overview of Amazon RDS Blue/Green Deployments for Aurora.
- Added support for GRANT/REVOKE .. ON SCHEMA .. in Babelfish.
  - Following permissions are supported based on the object types.

    - Scalar function permissions – EXECUTE.
    - Table-valued function permissions – EXECUTE.
    - Stored procedure permissions – EXECUTE.
    - Table permissions – DELETE, INSERT, REFERENCES, SELECT, UPDATE.
    - View permissions – DELETE, INSERT, REFERENCES, SELECT, UPDATE.
  - CASCADE isn't supported with Grant/Revoke on Schema.
  - GRANT/REVOKE OPTION FOR .. on SCHEMA isn't supported in Babelfish.
  - GRANT/REVOKE inside CREATE SCHEMA isn't supported in Babelfish.
- Added support for `sys.login_token` and `sys.user_token` system views.
- Added support for LIKE clause for some AI collations. For more information, see Deterministic and nondeterministic collations in Babelfish.
- Added support to Group Security based Active Directory authentication. Users can manage their workloads without provisioning individual logins with enhanced security posture. For more information, see Setting up kerberos authentication using Active Directory security groups for Babelfish.
- Added support of CTE and JOIN for PIVOT operator.
- Support ALTER syntax for Proc.
- Support renaming of a SQL Server database.
- Support unique constraints on nullable columns. Escape hatch `babelfishpg_tsql.escape_hatch_unique_constraint` has been deprecated.
- Introduced support to correlated subquery transform and cache for enhancement of query performance by transforming scalar correlated subquery into join query, or caching the subquery result set and reduce duplicate subquery re-executions when transformation is not possible. For more information, see Improving Aurora PostgreSQL query performance using subquery transformation .

Critical stability enhancements

- Fixed issue producing syntax error with delimited column alias without preceding whitespace.
- Creating a user for a login is blocked when its login is already a member of sysadmin.
- Fixed the column type of the T-SQL views to use nvarchar(max).
- Fixed the `definition` column of the TSQL view `sys.sql_modules` which should have the datatype `nvarchar(max)`.

- Fixed casting issue from geometry to `varbinary` or `byte` datatype when `SRID` is zero.
- Fixed the issue of indexes not being used in case of queries comparing numeric and integer data types.

High priority stability enhancements

- Fixed an issue where Babelfish unexpectedly throws an error when connected with `pyodbc` or `sqlalchemy`.
- Fixed an issue with INSTEAD OF TRIGGER clause when same table has AFTER TRIGGER set on it.
- Fixed issue of crash under certain conditions while executing bulk copy.
- Crash in `handle_where_clause_restargets_right()`.
- Fixed a bug that could cause server restart while executing `comment on trigger` statement on Babelfish for Aurora PostgreSQL instance endpoint.
- Fixed issue with CONVERT() to return date in correct dateformat when converted to `char` and `nchar`.
- Fixed issue with insertion of datetime string with dateformat 13 into column of type `datetime`.
- Fixed several columns in `sys.index_columns` system catalog. Also fixed issue with DDL export of tables with indexes.
- Fixed an issue with ALTER TABLE ... DROP CONSTRAINT where it wasn't able to drop constraint in some cases.
- Fixed the issue of getting unexpected error `not all Parameters have names` when SP_EXECSQL contain TVP.
- Fixed an issue in handling of update or delete statements in `sp_describe_undeclared_parameters`.
- Fixed behavioral differences while CAST of string literals to `datetime`, `datetime2` and `datetimeoffset`.
- Fixed behavioral differences in COALESCE function while being called with the combination of variables and constants.
- Fixed an issue where some queries with ORDER BY clause did not use primary key indexes.
- Fixed an issue with CREATE/ALTER PROCEDURE command that could cause server restart if procedure name contains special white characters.
- Fixed an issue where query may return incorrect result when predicate involves SCOPE_IDENTITY().

Additional improvements and enhancements

- Fixed memory leak in decimal (numeric) conversion for BCP import.
- Fixed the issue of `with tablock` hint resulting in an error for insert bulk statements.
- Added support for double-escaping and unbalanced quotes in `sp_tables table_type`.
- Added restriction on dropping of Babelfish extensions for all users except admin role.
- Prevent partial upgrades of Babelfish extensions.
- sys procedure columnproperty now support additional properties `iscomputed`, `columnid`, `ordinal`, `isidentity`.
- DDL scripting of indexes or constraints will now include correct ordering with columns.
- Fixed an error to allow referencing a `#tmp table` in a nested procedure through OBJECT_ID() clause.
- Fixed an issue to avoid error when dropping trigger created on temp table.
- Made an enhancement to allow table variables having a name longer than 63 characters.
- Fixed issue with --schema-only and --data-only options of BabelfishDump utilities.
- Fixed issue with BabelfishDump utility where it wasn't able to dump extended properties.
- Fixed issue of fully qualified column reference doesn't work in PIVOT aggregate function.
- Fixed an error to allow alter procedure from PG endpoint.
- Blocked SET/RESET role statements execution from TDS endpoint.
- Changed the default behavior of the full-text search GUC to have the feature turned OFF by default. You can set the GUC to `ignore` to use FTS features.

Babelfish for Aurora PostgreSQL 4.1

This release of Aurora Babelfish is provided with Aurora PostgreSQL 16.2. For more information about the improvements in Aurora PostgreSQL 16.2, see Amazon Aurora PostgreSQL updates. Babelfish for Aurora PostgreSQL 4.1 adds several new features, enhancements, and fixes. For more information about Babelfish for Aurora PostgreSQL, see Working with Babelfish for Aurora PostgreSQL.

Releases

- Aurora Babelfish release 4.1.4, July 30, 2025
- Aurora Babelfish release 4.1.3, February 02, 2025

- Aurora Babelfish release 4.1.2, October 7, 2024
- Aurora Babelfish release 4.1.1, June 20, 2024
- Aurora Babelfish release 4.1.0, April 29, 2024

Aurora Babelfish release 4.1.4, July 30, 2025

Security enhancements

- Fixed an issue with permission check in parallel worker where non-privileged user may get read access to data in some scenarios.

Aurora Babelfish release 4.1.3, February 02, 2025

High priority stability enhancements.

- Fixed an issue for date functions to allow them to take into account the local/session timezone setting.

Aurora Babelfish release 4.1.2, October 7, 2024

Security enhancements

- Fixed an issue with dropping users and roles by non-privileged user.

Aurora Babelfish release 4.1.1, June 20, 2024

High priority stability enhancements

- Optimized performance for Create and Drop Databases for Babelfish.
- Fixed a crash with execution of pltsql user defined functions.

Aurora Babelfish release 4.1.0, April 29, 2024

New features

- Babelfish introduces support for two spatial data types Geometry and Geography to store and manipulate spatial data under a limited scope. For more information, see Babelfish supports Geospatial data types.
- Allowing `SELECT FOR JSON AUTO` support in Babelfish.
- Support the ability to perform vector similarity search using the `pgvector` extension through Babelfish. The ability to use `HNSW` and `IVFLAT` indexes is also supported. For more information, see Using pgvector in Babelfish.
- Support the ability to access Amazon Machine Learning services such as Amazon Comprehend, Amazon Sagemaker and Amazon Bedrock through `aws_ml` extension. For more information, see Using Amazon Aurora machine learning with Babelfish.
- Support T-SQL procedure `sp_procedure_params_100_managed`.
- CONTAINS clause used in Full Text Search will also support for special characters and single digit in search condition. For more information, see Full Text Search in Babelfish.

Critical stability enhancements

- Fixed an issue in Object Explorer Database enumeration with SSMS version 19.2.
- Fixed an issue that caused error during Selecting data from variable `NVARCHAR(MAX)`, `VARCHAR(MAX)`, `VARBINARY(MAX)` with large length strings.
- Fixed blank space padding related issue in char datatype for multibyte characters.
- Fixed performance issue of enumerating tables and views in SSMS Object Explorer.
- Fixed default column collation to match server collation handled through `babelfishpg_tsql.server_collation_name` for some system views. List of fixed system views are `sys.check_constraints`, `sys.data_spaces`, `sys.default_constraints`, `sys.dm_exec_connections`, `sys.foreign_keys`, `sys.key_constraints`, `sys.stats`, `sys.syscolumns`, `sys.sysforeignkeys`, `sys.sysprocesses`, `sys.system_objects`, `sys.table_types`, `sys.tables`, `sys.types`, `sys.views` and `sys.xml_indexes`.
- Restrict creation of functions/procedures with the same name in Babelfish.

High priority stability enhancements

- Improved performance for system procedure `sp_tablecollations_100`.
- Fixed an issue with major version upgrades where views contains cast from string literal to binary type.
- Fixed a bug where parallel worker was unable to fetch the logical database name.
- Fixed the performance issue of comparing `date` to `datetime`.

Additional improvements and enhancements

- Fixed an issue on duplicate `object_id` in `sys.all_objects` after major version upgrade.
- Fixed an issue in CAST functions for `Binary` to `Varchar` and `Rowversion` to `Varchar`.
- Fixed an issue with insert into statement execution with table variable when table variable did not exist.
- Fixed an issue where input hex string being converted to type binary did not have the correct data length.
- Fixed an issue with mixed casing error in `sp_columns_100`.
- Fixed a crash in Table Variable lookup after TVP execution via `TDS RPC SPExecuteSQL`.
- Support embedded whitespace in multi-character comparison operators.
- Support operators adjacent to `@@variables` without separating whitespace.
- Fixed a crash with procedure execution if procedure deletes itself or rolls back the transaction which created the procedure.
- Support for the AS keyword in `CREATE` function for all cases.
- Support expressions in `SELECT...OFFSET...FETCH` clauses.
- Support `SET TRAN ISOLATION LEVEL` syntax.
- Support floating-point notation without exponent.
- Support comparison operators `!<` and `!>`.
- Support for `DROP INDEX schema.table.index` and `DROP INDEX index ON schema.table` syntax.

Babelfish for Aurora PostgreSQL 4.0

This release of Aurora Babelfish is provided with Aurora PostgreSQL 16.1. For more information about the improvements in Aurora PostgreSQL 16.1, see Amazon Aurora PostgreSQL updates. Babelfish for Aurora PostgreSQL 4.0 (version 4.0 is build on top of version 3.4) adds several new features, enhancements, and fixes. For more information about Babelfish for Aurora PostgreSQL, see Working with Babelfish for Aurora PostgreSQL.

Releases

- Aurora Babelfish release 4.0.4, August 4, 2025
- Aurora Babelfish release 4.0.3, February 5, 2025
- Aurora Babelfish release 4.0.2, September 17, 2024
- Aurora Babelfish release 4.0.1, June 24, 2024
- Aurora Babelfish release 4.0.0, January 31, 2024

Aurora Babelfish release 4.0.4, August 4, 2025

Security enhancements

- Fixed an issue with permission check in parallel worker where non-privileged user may get read access to data in some scenarios.

Aurora Babelfish release 4.0.3, February 5, 2025

High priority stability enhancements

- Fixed an issue for date functions to allow them to take into account the local/session timezone setting.

Aurora Babelfish release 4.0.2, September 17, 2024

Security enhancements

- Fixed an issue with dropping users and roles by non-privileged user.

Aurora Babelfish release 4.0.1, June 24, 2024

High priority stability enhancements

- Fixed an issue with Parallel query execution in which a backend may get into indefinite hang in certain cases.
- Optimized performance for Create and Drop Databases for Babelfish.
- Fixed a crash with execution of pltsql user defined functions.

Aurora Babelfish release 4.0.0, January 31, 2024

New features

- Limited support for Full Text Search in Babelfish. For more information, see Full Text Search in Babelfish.
- Added support for creating INSTEAD OF Triggers on Views.
- Changed the default Babelfish migration mode from single database to multiple databases.

Security enhancements

- Fixed security issues with handling of TSQL login and users.

High priority stability enhancements

- Fixed a regression issue where update-join with inserted table in trigger procedure causes `result relation must be a regular relation` error.
- Fixed the issue where querying `information_schema` for type U and V was earlier giving different results in Babelfish.
- Fixed an issue to avoid blocking of vacuum progress when using temp tables in certain situations.

Additional improvements and enhancements

- Fixed an issue with principal name in `pg_stat_gssapi` catalog view.
- Fixed issue in functions `parsename`, `session_context` and `sp_set_session_context` when using with non-default server collation.

Recommendations

- We recommend you to upgrade from Aurora PostgreSQL version 14 to 15 and then from version 15 to 16. Currently, direct upgrade from version 14 to 16 isn't supported and it fails with an error.

Babelfish for Aurora PostgreSQL 3.x versions (includes some deprecated versions)

Version updates

- Babelfish for Aurora PostgreSQL 3.14
- Babelfish for Aurora PostgreSQL 3.13
- Babelfish for Aurora PostgreSQL 3.12
- Babelfish for Aurora PostgreSQL 3.11
- Babelfish for Aurora PostgreSQL 3.10
- Babelfish for Aurora PostgreSQL 3.9
- Babelfish for Aurora PostgreSQL 3.8
- Babelfish for Aurora PostgreSQL 3.7
- Babelfish for Aurora PostgreSQL 3.6
- Babelfish for Aurora PostgreSQL 3.5
- Babelfish for Aurora PostgreSQL 3.4
- Babelfish for Aurora PostgreSQL 3.3
- Babelfish for Aurora PostgreSQL 3.2
- Babelfish for Aurora PostgreSQL 3.1 (Deprecated)

Babelfish for Aurora PostgreSQL 3.14

This release of Aurora Babelfish is provided with Aurora PostgreSQL 15.18. For more information about the improvements in Aurora PostgreSQL 15.18, see Amazon Aurora PostgreSQL updates. Babelfish for Aurora PostgreSQL 3.14 adds several new features, enhancements, and fixes. For more information about Babelfish for Aurora PostgreSQL, see Working with Babelfish for Aurora PostgreSQL.

Aurora Babelfish release 3.14.0, August 21, 2026

Critical enhancements

- Fixed an issue that could cause crash in SPI_finish after Out Of Memory error.

Babelfish for Aurora PostgreSQL 3.13

This release of Aurora Babelfish is provided with Aurora PostgreSQL 15.17. For more information about the improvements in Aurora PostgreSQL 15.17, see Amazon Aurora PostgreSQL updates. For more information about Babelfish for Aurora PostgreSQL, see Working with Babelfish for Aurora PostgreSQL.

Aurora Babelfish release 3.13.0, April 6, 2026

Critical enhancements

- Fixed an issue where update with output clause may skip rows during concurrent updates.

High Priority stability enhancements

- Blocked GRANT/REVOKE/DROP operations on Babelfish roles from PostgreSQL endpoint.

Babelfish for Aurora PostgreSQL 3.12

This release of Aurora Babelfish is provided with Aurora PostgreSQL 15.15. For more information about the improvements in Aurora PostgreSQL 15.15, see Amazon Aurora PostgreSQL updates. Babelfish for Aurora PostgreSQL 3.12 adds several enhancements and fixes. For more information about Babelfish for Aurora PostgreSQL, see Working with Babelfish for Aurora PostgreSQL.

Aurora Babelfish release 3.12.1, January 16, 2026

Critical stability enhancements

- Fixed an issue where an UPDATE statement with OUTPUT clause may skip rows when there are concurrent updates on the same row.

Aurora Babelfish release 3.12.0, December 18, 2025

Critical enhancements

- Active snapshots when system catalogs are being updated while ResetTempTableNamespace in TDS.

High Priority stability enhancements

- Added support for the planner to choose index scan for queries having predicates comparing numeric and money/smallmoney data types.
- Fixed an issue where rollback to savepoint in some cases failed to send the correct transaction state token to the client, causing subsequent operations in the transaction to fail.

Additional improvements and enhancements

- Fixed an issue to allow concurrent UPDATE operations with OUTPUT clauses.

Babelfish for Aurora PostgreSQL 3.11

This release of Aurora Babelfish is provided with Aurora PostgreSQL 15.14. For more information about the improvements in Aurora PostgreSQL 15.14, see Amazon Aurora PostgreSQL updates. Babelfish for Aurora PostgreSQL 3.11 adds several new features, enhancements, and fixes. For more information about Babelfish for Aurora PostgreSQL, see Working with Babelfish for Aurora PostgreSQL.

Releases

- Aurora Babelfish release 3.11.0, November 25, 2025

Aurora Babelfish release 3.11.0, November 25, 2025

Critical enhancements

- Fixed an issue during TDS Reset Connection in certain situations
- Added support to let index scan used in case of queries having predicates comparing numeric and integer data types

High Priority stability enhancements

- Fixed an issue with RESET ALL command from postgres endpoint
- Fixed an issue with response packets when reading large nvarchar(max) data, which could cause ArgumentOutOfRangeException with .NET driver.
- Fixed an issue where parallelism won't be used for pltsql RETURN expression
- Fixed an issue to preserve Timezone information during casting from string to datetimeoffset
- Fixed a crash in queries using 'FOR JSON AUTO' and 'JSON PATH'

Additional improvements and enhancements

- Fixed an issue while adding a column with default value which resulted in an error

Babelfish for Aurora PostgreSQL 3.10

This release of Aurora Babelfish is provided with Aurora PostgreSQL 15.13. For more information about the improvements in Aurora PostgreSQL 15.13, see Amazon Aurora PostgreSQL updates. Babelfish for Aurora PostgreSQL 3.10 adds several new features, enhancements, and fixes. For more information about Babelfish for Aurora PostgreSQL, see Working with Babelfish for Aurora PostgreSQL.

Releases

- Aurora Babelfish release 3.10.1, August 08, 2025
- Aurora Babelfish release 3.10.0, June 30, 2025

Aurora Babelfish release 3.10.1, August 08, 2025

Critical stability enhancements

- Fixed an issue during TDS Reset Connection in certain situations.

High priority stability enhancements

- Fixed a crash in queries using `FOR JSON AUTO` and `JSON PATH`.

Aurora Babelfish release 3.10.0, June 30, 2025

Critical enhancements

- Added support for larger server hello messages during SSL handshake by segmenting them into 4096 byte packets.
- Added support for CAST from VARBINARY to DATETIME in Babelfish.
- Added handling for default schema name for procedure in Group-AD session, when Table Valued Parameter is used as an argument of a procedure.
- Added “+” and “-” operator for varbinary.

High Priority stability enhancements

- Fixed PIVOT operator to gracefully handle NULL entries in pivot column.
- Fixed issue with result having incorrect scale in numeric/decimal addition and subtraction.
- Fixed issue which causes incorrect result in arithmetic operations which results in numeric/decimal type.
- Fixed an issue in round() function to ensure return types match input argument types.

Additional improvements and enhancements

- Fixed the entry in `babelfish_schema_permissions` which was getting overridden if there were table and procedure with the same name.
- Fixed an errors while fetching the object definition of tsql objects due to handling of few nodes in `sys.tsql_get_expr`.
- Fixed the logic for numeric/decimal datatype typmod resolution in outer/inner queries.
- Fixed case expression when one of the branch is NUMERIC and other is of EXACT NUMERIC.
- Fixed a crash in `resolve_numeric_typmod_from_exp` for aggregate functions using *(all columns).

Babelfish for Aurora PostgreSQL 3.9

This release of Aurora Babelfish is provided with Aurora PostgreSQL 15.12. For more information about the improvements in Aurora PostgreSQL 15.12, see Amazon Aurora PostgreSQL updates.

Babelfish for Aurora PostgreSQL 3.9 adds several new features, enhancements, and fixes. For more information about Babelfish for Aurora PostgreSQL, see Working with Babelfish for Aurora PostgreSQL.

Releases

- Aurora Babelfish release 3.9.2, October 09, 2025
- Aurora Babelfish release 3.9.1, June 03, 2025
- Aurora Babelfish release 3.9.0, April 08, 2025

Aurora Babelfish release 3.9.2, October 09, 2025

Critical stability enhancements

- Fixed an issue during TDS Reset Connection in certain situations.
- Fixed crash in `resolve_numeric_typmod_from_exp` for aggragate functions using *(all columns)

High priority stability enhancements

- Fixed a crash in queries using `FOR JSON AUTO` and `JSON PATH`.

Aurora Babelfish release 3.9.1, June 03, 2025

Security enhancements

- Fixed an issue with permission check in parallel worker where non-privileged user may get read access to data in some scenarios.

Critical stability enhancements

- Added support for larger server hello messages during SSL handshake.

Aurora Babelfish release 3.9.0, April 08, 2025

Critical enhancements

- Fixed an issue where trigger gets dropped when dropping a column in a table.

- Improved performance of queries having join between TABLE_CONSTRAINTS and KEY_COLUMN_USAGE view in the INFORMATION_SCHEMA schema.
- Fixed inconsistent formatting issue with Convert function when converting MONEY datatype with value 0 to string datatypes.
- Fixed formatting issues in CAST from MONEY to CHAR/VARCHAR.
- Fixed the issue where SELECT...INTO with MIN and MAX aggregations on MONEY columns lost type information.
- Implement modulo operator for MONEY type.
- Added Cleanup of stale parameters and configs in case of connection pooling.
- Added comprehensive cursor state cleanup to avoid stale data in case of connection pooling.
- Fixed a issue with IDENTITY columns not being recognized during DML statements using OUTPUT and WHERE clause.

High Priority stability enhancements

- Fixed an issue with system function OPENJSON.
- Fixed the incorrect result datatype of UNION involving MONEY type.
- Fixed offset when using "AT TIME ZONE" with DATETIME2 datatype conversion with convert() function in non-default local timezone setting.
- Improved string functions to handle a wider range of datatypes.
- Fixed an issue where batches containing cross database queries looks up the objects in incorrect database.
- Fixed behavior of DATEDIFF() and DATEDIFF_BIG() functions for week and quarter Datepart.
- Fixed an issue where sys.column_property may return incorrect results for ordinal property of a column.
- Fixed "AT TIME ZONE" issue near DST change time with DATETIME2 datatype conversion.
- Fixed behavior of queries which use sys.Db_id() function which returned empty rows in enforced parallel mode.

Additional improvements and enhancements

- Fixed an issue where smalldatetime type and date type can more flexibly access data through index.

- Fixed an issue with system procedure `fn_listextendedproperty`.
- Fixed the use of table-valued parameters as arguments in procedures. Previously, you had to specify the type name of the table-valued parameter when calling the procedure, now it is optional.
- Fixed precision and scale when common type of `CASE` expression is `NUMERIC` / `DECIMAL` .
- Fixed an issue where `sys.dm_exec_sessions` may have abandoned entries for already terminated connections.
- Fixed an issue where a login with mapped database user still has guest user privileges.
- Fixed an issue where transaction count changes after execution of some system functions.
- Fixed issue where `Datepart` functions were having different output based on the GUC `timezone`.

Babelfish for Aurora PostgreSQL 3.8

This release of Aurora Babelfish is provided with Aurora PostgreSQL 15.10. For more information about the improvements in Aurora PostgreSQL 15.10, see Amazon Aurora PostgreSQL updates. Babelfish for Aurora PostgreSQL 3.8 adds several new features, enhancements, and fixes. For more information about Babelfish for Aurora PostgreSQL, see Working with Babelfish for Aurora PostgreSQL.

Releases

- Aurora Babelfish release 3.8.3, November 13, 2025
- Aurora Babelfish release 3.8.2, June 24, 2025
- Aurora Babelfish release 3.8.1, January 20, 2025
- Aurora Babelfish release 3.8.0, December 27, 2024

Aurora Babelfish release 3.8.3, November 13, 2025

Critical stability enhancements

- Fixed an issue during TDS Reset Connection in certain situations.

High priority stability enhancements

- Fixed a crash in queries using `FOR JSON AUTO` and `JSON PATH`.

Aurora Babelfish release 3.8.2, June 24, 2025

Security enhancements

- Fixed an issue with permission check in parallel worker where non-privileged user may get read access to data in some scenarios.

Aurora Babelfish release 3.8.1, January 20, 2025

High priority stability enhancements

- Fixed an issue where transactional commands may terminate the connection in some cases.

Aurora Babelfish release 3.8.0, December 27, 2024

New features

- Added support for `ALTER FUNCTION` syntax.
- Enabled the `pgaudit` extension support with Babelfish.
- Enabled user to create view on statement with `PIVOT` operator.
- Enabled support of `sys.sp_reset_connection` stored procedure to reset connection.
- Enabled cross-database references of objects (tables/views/functions) in views.

High priority stability enhancements

- Fixed date functions to take into account the timezone setting.
- Improved error handling behavior for `relation does not exist` and `column does not exist` errors.
- Fixed `sp_tables` stored procedure to correctly handle three-part object names across databases to retrieve correct database name during linked servers usage.
- Fixed an issue to enable database owner login to explore database objects in SSMS.
- Fixed `sp_tables` stored procedure to return correct result when @table_name parameter has square brackets around underscore (_).
- Fixed an issue where individual login active directory authentication used to throw error of `pg_ad_mapping` the `plugin` extension pointer not initialized.
- Fixed an issue where index creation could fail if the table is created using `SELECT INTO` syntax.

- Fixed an permission issue with cross-database function calls.
- Enabled Grant on schema to takes effect correctly on future objects created in that schema by any of the schema's authorized users.
- Fixed an issue to insert correct value in the table having identity column.
- Fixed an issue to have correct identity sequence value when bcp or SqlBulkCopy or insert bulk are used with `keep identity values` mode.

Additional improvements and enhancements

- Fixed the issue with Kill command which still left few sessions running after the command.
- Fixed the issue of `sys.identity_columns` view was wrongly returning more entries than it should.
- Fixed the issue of CASE statement and MIN/MAX functions related to error of string size not being defined or using explicit cast.
- Fixed an issue with ISNUMERIC function to return correct result for nvarchar/varchar parameters.
- Fixed the issue of CASE statement not working correctly when branch expression is of NVARCHAR type.
- Fixed behavior of CONCAT() and CONCAT_WS() functions for multibyte characters and to work with atleast 2 and 3 arguments respectively.
- Fixed an issue to allow ALTER COLUMN with type char for Temp Table.
- Fixed an issue in CONVERT function to make it work consistently with BINARY and VARBINARY types in Babelfish.
- Fixed the issue of inconsistent output from select query with FOR XML PATH clause.
- Fixed an issue to rethrow correct TSQL error code.
- Fixed behaviour of `STRING_AGG()` function for input containing multibyte characters.
- Fixed an issue where wrong overloaded variant of `regexp_replace` is called during restore.
- Fixed cast from `sys.varchar` to TIME type.

Babelfish for Aurora PostgreSQL 3.7

This release of Aurora Babelfish is provided with Aurora PostgreSQL 15.8. For more information about the improvements in Aurora PostgreSQL 15.8, see Amazon Aurora PostgreSQL updates. Babelfish for Aurora PostgreSQL 3.7 adds several new features, enhancements, and fixes. For

more information about Babelfish for Aurora PostgreSQL, see Working with Babelfish for Aurora PostgreSQL.

Releases

- Aurora Babelfish release 3.7.3, November 21, 2025
- Aurora Babelfish release 3.7.2, July 11, 2025
- Aurora Babelfish release 3.7.1, January 02, 2025
- Aurora Babelfish release 3.7.0, September 30, 2024

Aurora Babelfish release 3.7.3, November 21, 2025

High priority stability enhancements

- Fixed a crash in queries using `FOR JSON AUTO` and `JSON PATH`.

Aurora Babelfish release 3.7.2, July 11, 2025

Security enhancements

- Fixed an issue with permission check in parallel worker where non-privileged user may get read access to data in some scenarios.

Aurora Babelfish release 3.7.1, January 02, 2025

High priority stability enhancements

- Fixed an issue where individual login active directory authentication used to throw error of pg_ad_mapping the `plugin` extension pointer not initialized.
- Fixed an issue for date functions to allow them to take into account the local/session timezone setting.

Aurora Babelfish release 3.7.0, September 30, 2024

New Features

- Enabling support for `STContains`, `STEquals`, `STArea` the `PostGIS` extension functions for geospatial datatypes.

Security enhancements

- Fixed an issue that potentially allowed non-privileged users to drop other users and roles in some scenarios.
- Fixed an issue with `sys.database_principals` view where it was showing metadata related to all the users irrespective of privileges of server principal.

High Priority stability enhancements

- Fixed an issue with `information_schema.tables` returning incorrect table_name.
- Fixed an issue where less than operator gives incorrect results for binary data types.
- Fixed inconsistency with OIDs of triggers in `OBJECT_ID()` function and `sys.objects` view.
- Fixed an issue for the `plpgsql` extension function. The function's local settings for run-time configuration variables may not be reset at the end of function execution when Babelfish is installed.

Additional improvements and enhancements

- Fixed behavior of `TRIM()`, `LTRIM()`, `RTRIM()`, `LEFT()`, and `RIGHT()` functions for input containing multibyte characters, by returning result with appropriate datatype based on argument datatype.
- Improved performance of like operator with non deterministic collations.
- Fixed an issue where search patch may be incorrect when database name and/or schema name contains special characters in quotes.
- Fixed difference in behavior in Babelfish and TSQL for `UPPER()` and `LOWER()` functions with multibyte characters and appropriate argument and return types.
- The `sp_tables` procedure now allows you to use the `%` wildcard character in the `@table_qualifier` parameter. This makes it easier to search for tables by matching patterns in the table names.
- Fixed difference in behavior in Babelfish and TSQL for `STUFF()` , `SUBSTRING()` and `TRANSLATE()` functions with multibyte characters and appropriate argument and return types.
- Updated error message for GRANT/REVOKE/DENY statements.

- Fixed behavior of `REVERSE()`, `REPLACE()`, and `REPLICATE()` functions for input containing multibyte characters, by returning result with appropriate datatype based on argument datatype.
- Fixed output of `SPACE()` function for non-positve input argument.
- Improved memory handling when using BCP on a table with indexes.
- Fixed an issue where DML with `OUTPUT INTO` clause fired a trigger and may result in error.
- Fixed a data type resolve issue with union clause.
- Fixed an error message for `SUBSTRING()` function when the number of arguments are not appropriate.
- Fixed an issue when comment comes with the column name.
- Fixed an issue with `sys.server_principals` view to show `public` role entry.
- Fixed DDL export issue for database with SSMS.
- Added support to show windows group membership in T-SQL function `IS_MEMBER()`.

Babelfish for Aurora PostgreSQL 3.6

This release of Aurora Babelfish is provided with Aurora PostgreSQL 15.7. For more information about the improvements in Aurora PostgreSQL 15.7, see Amazon Aurora PostgreSQL updates. Babelfish for Aurora PostgreSQL 3.6 adds several new features, enhancements, and fixes. For more information about Babelfish for Aurora PostgreSQL, see Working with Babelfish for Aurora PostgreSQL.

Releases

- Aurora Babelfish release 3.6.3, July 17, 2025
- Aurora Babelfish release 3.6.2, January 23, 2025
- Aurora Babelfish release 3.6.1, September 27, 2024
- Aurora Babelfish release 3.6.0, August 8, 2024

Aurora Babelfish release 3.6.3, July 17, 2025

Security enhancements

- Fixed an issue with permission check in parallel worker where non-privileged user may get read access to data in some scenarios.

Aurora Babelfish release 3.6.2, January 23, 2025

High priority stability enhancements

- Fixed an issue where individual login active directory authentication used to throw error of pg_ad_mapping the `plugin` extension pointer not initialized.
- Fixed an issue for date functions to allow them to take into account the local/session timezone setting.

Aurora Babelfish release 3.6.1, September 27, 2024

Security enhancements

- Fixed an issue with dropping users and roles by non-privileged user.

Aurora Babelfish release 3.6.0, August 8, 2024

New features

- Introduced support for PostgreSQL native logical replication so that users can replicate and synchronize individual tables from a source to one or more recipients using a publisher and subscriber model.
- Added support for Blue/Green deployments with Babelfish. You can now use Amazon RDS Blue/Green Deployments, to make and test database changes before implementing them in a production environment. For more information, see Overview of Amazon RDS Blue/Green Deployments for Aurora.
- Added support for GRANT/REVOKE .. ON SCHEMA .. in Babelfish.
  - Following permissions are supported based on the object types.
    - Scalar function permissions – EXECUTE.
    - Table-valued function permissions – EXECUTE.
    - Stored procedure permissions – EXECUTE.
    - Table permissions – DELETE, INSERT, REFERENCES, SELECT, UPDATE.
    - View permissions – DELETE, INSERT, REFERENCES, SELECT, UPDATE.
  - CASCADE isn't supported with Grant/Revoke on Schema.
  - GRANT/REVOKE OPTION FOR .. on SCHEMA isn't supported in Babelfish.

  - GRANT/REVOKE inside CREATE SCHEMA isn't supported in Babelfish.
- Added support for `sys.login_token` and `sys.user_token` system views.
- Added support for LIKE clause for some AI collations. For more information, see Deterministic and nondeterministic collations in Babelfish.
- Added support to Group Security based Active Directory authentication. Users can manage their workloads without provisioning individual logins with enhanced security posture. For more information, see Setting up kerberos authentication using Active Directory security groups for Babelfish.
- Added support of CTE and JOIN for PIVOT operator.
- Support ALTER syntax for Proc.
- Support renaming of a SQL Server database.
- Support unique constraints on nullable columns. Escape hatch `babelfishpg_tsql.escape_hatch_unique_constraint` has been deprecated.

Critical stability enhancements

- Fixed issue producing syntax error with delimited column alias without preceding whitespace.
- Creating a user for a login is blocked when its login is already a member of sysadmin.
- Fixed the column type of the T-SQL views to use nvarchar(max).
- Fixed the `definition` column of the TSQL view `sys.sql_modules` which should have the datatype `nvarchar(max)`.
- Fixed casting issue from geometry to `varbinary` or `byte` datatype when `SRID` is zero.
- Fixed the issue of indexes not being used in case of queries comparing numeric and integer data types.

High priority stability enhancements

- Fixed an issue where Babelfish unexpectedly throws an error when connected with `pyodbc` or `sqlalchemy`.
- Fixed an issue with INSTEAD OF TRIGGER clause when same table has AFTER TRIGGER set on it.
- Fixed issue of crash under certain conditions while executing bulk copy.
- Crash in `handle_where_clause_restargets_right()`.

- Fixed a bug that could cause server restart while executing `comment on trigger` statement on Babelfish for Aurora PostgreSQL instance endpoint.
- Fixed issue with CONVERT() to return date in correct dateformat when converted to `char` and `nchar`.
- Fixed issue with insertion of datetime string with dateformat 13 into column of type `datetime`.
- Fixed several columns in `sys.index_columns` system catalog. Also fixed issue with DDL export of tables with indexes.
- Fixed an issue with ALTER TABLE ... DROP CONSTRAINT where it wasn't able to drop constraint in some cases.
- Fixed the issue of getting unexpected error `not all Parameters have names` when SP_EXECSQL contain TVP.
- Fixed an issue in handling of update or delete statements in `sp_describe_undeclared_parameters`.
- Fixed behavioral differences while CAST of string literals to `datetime`, `datetime2` and `datetimeoffset`.
- Fixed behavioral differences in COALESCE function while being called with the combination of variables and constants.
- Fixed an issue where some queries with ORDER BY clause did not use primary key indexes.
- Fixed an issue with CREATE/ALTER PROCEDURE command that could cause server restart if procedure name contains special white characters.
- Fixed an issue where query may return incorrect result when predicate involves SCOPE_IDENTITY().

Additional improvements and enhancements

- Fixed memory leak in decimal (numeric) conversion for BCP import.
- Fixed the issue of `with tablock` hint resulting in an error for insert bulk statements.
- Added support for double-escaping and unbalanced quotes in `sp_tables table_type`.
- Added restriction on dropping of Babelfish extensions for all users except admin role.
- Prevent partial upgrades of Babelfish extensions.
- sys procedure columnproperty now support additional properties `iscomputed`, `columnid`, `ordinal`, `isidentity`.
- DDL scripting of indexes or constraints will now include correct ordering with columns.

- Fixed an error to allow referencing a `#tmp table` in a nested procedure through OBJECT_ID() clause.
- Fixed an issue to avoid error when dropping trigger created on temp table.
- Made an enhancement to allow table variables having a name longer than 63 characters.
- Fixed issue with --schema-only and --data-only options of BabelfishDump utilities.
- Fixed issue with BabelfishDump utility where it wasn't able to dump extended properties.
- Fixed issue of fully qualified column reference doesn't work in PIVOT aggregate function.
- Fixed an error to allow alter procedure from PG endpoint.
- Blocked SET/RESET role statements execution from TDS endpoint.

Babelfish for Aurora PostgreSQL 3.5

This release of Aurora Babelfish is provided with Aurora PostgreSQL 15.6. For more information about the improvements in Aurora PostgreSQL 15.6, see Amazon Aurora PostgreSQL updates. Babelfish for Aurora PostgreSQL 3.5 adds several new features, enhancements, and fixes. For more information about Babelfish for Aurora PostgreSQL, see Working with Babelfish for Aurora PostgreSQL.

Releases

- Aurora Babelfish release 3.5.4, July 30, 2025
- Aurora Babelfish release 3.5.3, February 02, 2025
- Aurora Babelfish release 3.5.2, October 7, 2024
- Aurora Babelfish release 3.5.1, June 20, 2024
- Aurora Babelfish release 3.5.0, April 29, 2024

Aurora Babelfish release 3.5.4, July 30, 2025

Security enhancements

- Fixed an issue with permission check in parallel worker where non-privileged user may get read access to data in some scenarios.

Aurora Babelfish release 3.5.3, February 02, 2025

High priority stability enhancements

- Fixed an issue for date functions to allow them to take into account the local/session timezone setting.

Aurora Babelfish release 3.5.2, October 7, 2024

Security enhancements

- Fixed an issue with dropping users and roles by non-privileged user.

Aurora Babelfish release 3.5.1, June 20, 2024

High priority stability enhancements

- Fixed a crash with execution of pltsql user defined functions.

Aurora Babelfish release 3.5.0, April 29, 2024

New features

- Babelfish introduces support for two spatial data types Geometry and Geography to store and manipulate spatial data under a limited scope. For more information, see Babelfish supports Geospatial data types.
- Allowing `SELECT FOR JSON AUTO` support in Babelfish.
- Support the ability to perform vector similarity search using the `pgvector` extension through Babelfish. The ability to use `HNSW` and `IVFLAT` indexes is also supported. For more information, see Using pgvector in Babelfish.
- Support the ability to access Amazon Machine Learning services such as Amazon Comprehend, Amazon Sagemaker and Amazon Bedrock through `aws_ml` extension. For more information, see Using Amazon Aurora machine learning with Babelfish.
- Support T-SQL procedure `sp_procedure_params_100_managed`.
- Support creating Instead of Triggers (DML) on SQL Server Views.

Critical stability enhancements

- Fixed an issue in Object Explorer Database enumeration with SSMS version 19.2.
- Fixed an issue that caused error during Selecting data from variable `NVARCHAR(MAX)`, `VARCHAR(MAX)`, `VARBINARY(MAX)` with large length strings.
- Fixed blank space padding related issue in char datatype for multibyte characters.
- Fixed performance issue of enumerating tables and views in SSMS Object Explorer.
- Fixed default column collation to match server collation handled through `babelfishpg_tsql.server_collation_name` for some system views. List of fixed system views are `sys.check_constraints`, `sys.data_spaces`, `sys.default_constraints`, `sys.dm_exec_connections`, `sys.foreign_keys`, `sys.key_constraints`, `sys.stats`, `sys.syscolumns`, `sys.sysforeignkeys`, `sys.sysprocesses`, `sys.system_objects`, `sys.table_types`, `sys.tables`, `sys.types`, `sys.views` and `sys.xml_indexes`.
- Restrict creation of functions/procedures with the same name in Babelfish.

High priority stability enhancements

- Improved performance for system procedure `sp_tablecollations_100`.
- Fixed an issue with major version upgrades where views contains cast from string literal to binary type.
- Fixed a bug where parallel worker was unable to fetch the logical database name.
- Fixed the performance issue of comparing `date` to `datetime`.

Additional improvements and enhancements

- Fixed an issue on duplicate `object_id` in `sys.all_objects` after major version upgrade.
- Fixed an issue in CAST functions for `Binary` to `Varchar` and `Rowversion` to `Varchar`.
- Fixed an issue with insert into statement execution with table variable when table variable did not exist.
- Fixed an issue where input hex string being converted to type binary did not have the correct data length.
- Fixed an issue with mixed casing error in `sp_columns_100`.
- Fixed a crash in Table Variable lookup after TVP execution via `TDS RPC SPExecuteSQL`.

- Support embedded whitespace in multi-character comparison operators.
- Support operators adjacent to `@@variables` without separating whitespace.
- Fixed a crash with procedure execution if procedure deletes itself or rolls back the transaction which created the procedure.
- Support for the `AS` keyword in `CREATE` function for all cases.
- Support expressions in `SELECT...OFFSET...FETCH` clauses.
- Support `SET TRANSACTION ISOLATION LEVEL` syntax.
- Support floating-point notation without exponent.
- Support comparison operators `!<` and `!>`.
- Support for `DROP INDEX schema.table.index` and `DROP INDEX index ON schema.table` syntax.
- Fixed issue in functions `parsename`, `session_context` and `sp_set_session_context` when using with non-default server collation.

Babelfish for Aurora PostgreSQL 3.4

This release of Aurora Babelfish is provided with Aurora PostgreSQL 15.5. For more information about the improvements in Aurora PostgreSQL 15.5, see Amazon Aurora PostgreSQL updates. Babelfish for Aurora PostgreSQL 3.4 adds several new features, enhancements, and fixes. For more information about Babelfish for Aurora PostgreSQL, see Working with Babelfish for Aurora PostgreSQL.

Releases

- Aurora Babelfish release 3.4.4, August 4, 2025
- Aurora Babelfish release 3.4.3, February 5, 2025
- Aurora Babelfish release 3.4.2, September 17, 2024
- Aurora Babelfish release 3.4.1, June 24, 2024
- Aurora Babelfish release 3.4.0, December 21, 2023

Aurora Babelfish release 3.4.4, August 4, 2025

Security enhancements

- Fixed an issue with permission check in parallel worker where non-privileged user may get read access to data in some scenarios.

Aurora Babelfish release 3.4.3, February 5, 2025

High priority stability enhancements

- Fixed an issue for date functions to allow them to take into account the local/session timezone setting.

Aurora Babelfish release 3.4.2, September 17, 2024

Security enhancements

- Fixed an issue with dropping users and roles by non-privileged user.

Aurora Babelfish release 3.4.1, June 24, 2024

High priority stability enhancements

- Fixed a crash with execution of pltsql user defined functions.

Aurora Babelfish release 3.4.0, December 21, 2023

New features

- Added support for TSQL Isolation Level SERIALIZABLE and REPEATABLE READ with PostgreSQL semantics. For more information, see Transaction Isolation Levels in Babelfish.
- Added support for enable or disable triggers.
- Added support for TSQL functions DATETRUNC(), DATE_BUCKET(), SWITCHOFFSET(), TODATETIMEOFFSET(), and AT TIME ZONE clause.
- Added support for TSQL functions TYPE_ID(), TYPE_NAME(), COL_LENGTH(), COL_NAME().
- Added support for DEFAULT keyword in calls to stored procedures and functions.
- Added support for casting DATETIME to numeric types.
- Added support for DBCC CHECKIDENT for ability to reset IDENTITY columns.
- Added support for PRIMARY KEY NOT NULL IDENTITY clause in CREATE/ALTER TABLE.

- Added support for double-quoted strings containing single-quote, embedded double quotes in a double-quoted string, and unquoted string parameters.
- Added support for ALTER AUTHORIZATION syntax to change database owner.
- Added support for TSQL KILL command.
- Added support for TSQL Information_schema.key_column_usage view.
- Added support of variable as input for SET ROWCOUNT and SET DATEFIRST.
- Added support for sys.server_role members and sys.database_permissions catalog views.
- Added support for IDENTITY() function in a SELECT-INTO statement. In Babelfish, a column specified as IDENTITY will always be the last column in the new table. Due to this slight difference compared with SQL server, this feature needs to be used with an escape hatch babelfishpg_tsql.escape_hatch_identity_function. User-defined datatypes for IDENTITY() function are not currently supported.
- Added support for ALTER USER...WITH LOGIN syntax.
- Added support for change in transaction isolation from inside transaction block with well defined behavior.
- Added support for casting datetime and smalldatetime to numeric types.
- Added support for PIVOT in limited scope (not supported when used in a view definition, a common table expression, or a join).
- Stored procedure sp_changedbowner is supported.

Security enhancements

- Fixed permission issue for view sys.server_principals.

Critical stability enhancements

- Fixed an issue where ISNULL function may return incorrect data type.
- Fixed an issue where condition may be evaluated incorrectly for conditional statement like IF.
- Fixed an error "database ... does not exist" that may be observed when parallel query is enforced.
- Fixed handling of table variable or temp table when parallel worker is enforced.
- Fixed unexpected error "lost connection to parallel worker" occurring when parallel worker is enforced.
- Fixed an issue with multiple parentheses in SELECT columns.

- Fixed an issue with handling of column name alias which may cause client to hang if column name alias contains string of length more than 64 bytes, for example, select col as '您对“数据一览“中的车型，颜色，内饰，选装, '.
- Fixed datatype of information_schema_tsql.tables.TABLE_TYPE column.
- Fixed the error - “column ... does not exist” when using table.column with alias defined for table or schema_name.table.column in set clause of update queries.
- Fixed issue of incorrect schema resolution for multiple functions in query statement.
- Fixed an issue for a few variants of DELETE with OUTPUT clause combined with table alias returns an error.
- Fixed performance issue while expanding stored procedures in SSMS Object Explorer.
- Fixed a crash when UNION with NULL values not cast to fixed-length types.
- Fixed SESSION_USER/SYSTEM_USER in SET/PRINT/DECLARE variable assignment returning wrong result/error.
- Fixed issue of blocking of UNIQUE constraint/index on nullable column not implemented consistently.
- Fix a crash with T-SQL OPENQUERY() and four-part object name when T-SQL keywords are used as server name.
- Fixed the issue of update with TOP, OUTPUT and join failing with error ‘unrecognized node type’.
- Fixed the issue of VALUES clause with mixed types gives error containing the clause ‘Please use an explicit CAST or CONVERT’.
- Fixed an issue of different assignments of identity values compared with SQL Server when ORDER BY is used with SELECT INTO statement.
- Fix incorrect schema resolution where multiple functions are called in a single statement.

High priority stability enhancements

- Fixed type conversion between varchar and binary datatype with use of proper encoding.
- Fixed an issue where upper/lower case may not be preserved for column name aliases.
- Fixed crash in queries involving money data-type in parallel query mode.
- Fixed failure in MVU with non-default server collation name.
- Fixed the issue of information_schema vs. sys.objects WHERE type IN ('U', 'V') giving different result in Babelfish.

- Fixed issue of sp_columns and sp_columns_100 incorrectly show NULL radix for decimal columns.
- Fixed issue in queries involving sys.format() function in parallel query mode returning error “cannot start subtransactions during a parallel operation”.
- Fixed unexpected error “could not access file "pg_hint_plan": No such file or directory" while using pg_hint_plan in parallel query mode.
- Fixed the issue of getting error ‘duplicate key value violates unique constraint ...' when re-creating the previously dropped view with the same name.

Additional improvements and enhancements

- Improved performance for stored procedure sp_describe_undeclared_parameters.
- Fixed performance issue for DATEADD(), DATEDIFF().
- SSMS - Fixed issue of stored procedure takes long time to load in Object Explorer.
- SSMS - Fixed performance issue of enumerating tables and views in SSMS Object Explorer.
- Fixed performance issue after create/upgrade of Babelfish extension by running ANALYZE after Babelfish extension creation and upgrade.
- Fixed the issue of index not used when query has an unnecessary cast to bigint.
- Fixed an issue when stored procedures starting with (sp_*) are invoked with a dbo. or sys. prefix.
- Fixed the issue with default_schema_name column of the catalog sys.babelfish_authid_user_ext in case of "guest" user.
- Fixed issue of orphan entries in sys.babelfish_view_def catalog table.
- Fixed an issue with UNION and fixed-length types.
- Fixed performance issue with '+' operator in concatenation operation.
- Fixed performance issue by optimizing use of internal function during index creation and usage in queries.
- Fixed an issue when comparing BIT and VARCHAR types.
- Performance improvements for create/drop database with large number of databases.
- Added sort operators for Babelfish datatypes, so that MAX/MIN aggregation on index column can have a query plan candidate of LIMIT 1 and index scan.
- Fixed nulls order of Babelfish indexes, so that TOP 1 clause on index column can have a query plan candidate of LIMIT 1 and index scan.

- Fixed a crash with SSMS in Table properties dialog box while clicking on Permissions page.
- Restricted use of view as a target with OUTPUT INTO clause.

Babelfish for Aurora PostgreSQL 3.3

This release of Aurora Babelfish is provided with Aurora PostgreSQL 15.4. For more information about the improvements in Aurora PostgreSQL 15.4, see Amazon Aurora PostgreSQL updates. Babelfish for Aurora PostgreSQL 3.3 adds several new features, enhancements, and fixes. For more information about Babelfish for Aurora PostgreSQL, see Working with Babelfish for Aurora PostgreSQL.

Releases

- Aurora Babelfish release 3.3.1, November 14, 2024
- Aurora Babelfish release 3.3.0, October 24, 2023

Aurora Babelfish release 3.3.1, November 14, 2024

Security enhancements

- Fixed an issue with dropping users and roles by non-privileged user.

Aurora Babelfish release 3.3.0, October 24, 2023

New features

- Added support for TSQL functions `HOST_ID()`, `EOMONTH()`, `PARSENAME()` and `SMALLDATETIMEFROMPARTS()` are supported.
- `sys.extended_properties` system catalog view is supported.
- Stored procedures `sp_enum_oledb_providers`, `sp_testlinkedserver`, and `sp_who` are supported.
- Added support for the T-SQL square bracket syntax with the LIKE predicate.
- Added support for `pg_stat_statements` extension with Babelfish. For more information, see pg_stat_statements.
- Added support for CREATE or ALTER or DROP EXTENSION statements in `sp_execute_postgresql` procedure. For more information, see sp_execute_postgresql.

- Added support for extended properties for object types database, schema, table, view, column, sequence, function, procedure: `sys.extended_properties` system catalog view, stored procedures `sp_addextendedproperty`, `sp_updateextendedproperty`, `sp_dropextendedproperty`, and system function `fn_listextendedproperty()`.

Critical stability enhancements

- T-SQL trigger can't be performed when function, procedure or trigger of PostgreSQL is in execution stack. If you try to do, the following error message will appear: `T-SQL trigger can not be executed from PostgreSQL function, procedure or trigger.`

High priority stability enhancements

- Fixed the issue of GETDATE() incorrectly returning different values in the same query.
- Fixed the issue of GETUTCDATE() incorrectly returning time of transaction instead of time of query.

Additional improvements and enhancements

- Fixed an issue where SSMS generate script for multiple views, or combining a view with other objects throws an error.
- Fixed an issue to avoid system crash while formatting `datetime` values in the results of FOR JSON or FOR XML.
- Fixed an issue to avoid system crash during table variable cleanup after a runtime error.
- Fixed an issue to avoid system crash when using certain values in nested function calls.
- Fixed an invalid memory access issue while freeing `PLTSQL` functions.
- Fixed a crash in `SqlBulkCopy` when the order of columns is different from the table where it is defined.
- Fixed an issue that `bcp in` results in server crash when the table has large number of columns.
- Fixed crash in parallel query when `enable_pg_hint` is turned on.
- Fixed incorrect value in procedure output parameter when procedure is called by name and is in different parameter order.
- Fixed issue where `sp_describe_first_result_set` procedure can return incorrect column order, which could cause BCP to work incorrectly.

- Fixed issue related to loss of decimal digits when converting from REAL to DECIMAL.
- Fixed error handling during the Babelfish upgrade process. Babelfish throws an error if there is a failure during the upgrade.
- Fixed an issue with sender of XML data type to handle `NULL` value where it was causing client to hang.
- Fixed an issue where USE database statement was incorrectly allowed inside the procedure, function or trigger definition.
- Fixed crash while calling T-SQL procedure from PG port when querying `sys.sysobjects`.
- Fixed issue when user mapping that is created as part of `sp_addlinkedsrvlogin` works only when OPENQUERY() and remote object references with a four-part object names are invoked within the master database.
- Added support for `connect_timeout` option in `sp_serveroption`.
- Fixed a recreation issue with indexed temp tables. You can now create indexed temp tables in Babelfish.
- Fixed an issue with identity columns in procedures.
- Fixed an issue where some catalog entries were not being cleared after use with temp tables, causing occasional error messages.
- Fixed an issue with Babelfish TOP clause that accept number without parenthesis.
- Fixed performance problem for create index or scan index.
- Fixed an issue when using like expression in join on condition failed with nondeterministic error.

Babelfish for Aurora PostgreSQL 3.2

This release of Aurora Babelfish is provided with Aurora PostgreSQL 15.3. For more information about the improvements in Aurora PostgreSQL 15.3, see Amazon Aurora PostgreSQL updates. Babelfish for Aurora PostgreSQL 3.2 adds several new features, enhancements, and fixes. For more information about Babelfish for Aurora PostgreSQL, see Working with Babelfish for Aurora PostgreSQL.

Releases

- Aurora Babelfish release 3.2.2, November 12, 2024
- Aurora Babelfish release 3.2.1, October 4, 2023
- Aurora Babelfish release 3.2.0, July 13, 2023

Aurora Babelfish release 3.2.2, November 12, 2024

Security enhancements

- Fixed an issue with dropping users and roles by non-privileged user.

Aurora Babelfish release 3.2.1, October 4, 2023

High priority stability enhancements

- Fixed an issue causing crash when cursor referencing a table variable is already dropped.
- Fixed an issue where queries with UNION ALL, ORDER BY, and multiple joins could cause unavailability.
- Fixed a crash in parallel query execution when `enable_pg_hint` is set to on.
- Fixed an invalid memory access while freeing PLTSQL functions.

Additional improvements and enhancements

- Fixed an issue to avoid crash by properly handling formatting of datetime values in the results of FOR JSON or FOR XML.
- Fixed a crash in `SqlBulkCopy` when the order of columns is different compared to table defining.
- Fixed an issue that `bcp in` results in server crash when the table has large number of columns.
- Fixed incorrect value in procedure output parameter when procedure is called by name and is in different parameter order.
- Fixed a crash when dropping temp table or table variables during cleanup.
- Fixed an issue with sender of XML data type to handle NULL value where it was causing client to hang.
- Fixed issue when user mapping that is created as part of `sp_addlinkedsrvlogin` works only when OPENQUERY() and remote object referenced with a four-part object names are invoked within the master database.
- Fixed an issue to avoid failure error message 2600 while attempting to create a temp table.
- Fixed a bug to prevent temp table index recreation issue.

Aurora Babelfish release 3.2.0, July 13, 2023

New features

- Supports TIMEFROMPARTS(), DATETIME2FROMPARTS(), ROWCOUNT_BIG(), DATABASE_PRINCIPAL_ID() and CONTEXT_INFO() T-SQL functions.
- Supports STDEV(), STDEVP(), VAR(), VARP() statistical T-SQL aggregates.
- Supports sp_rename for COLUMN , TRIGGER, TABLE TYPE and USER DEFINED DATATYPE objects.
- Supports Babelfish instance as a linked server from SQL server instance. For more information, see Babelfish supports linked servers.
- Supports 4 parts object name references for remote objects for select queries. For more information, see Babelfish supports linked servers.
- Supports TOP clause for INSERT SELECT statement.
- Supports SET rowcount and SET CONTEXT_INFO T-SQL syntax.

Security enhancements

- Fixed an issue that non-sysadmin logins could DROP or ALTER logins.

Critical stability enhancements

- Fixed an issue when table variables may cause orphaned metadata entries.
- Fixed the issue that CTE top order handles null first behavior incorrectly.

High priority stability enhancements

- Fixed intermittent issue with concurrent SSL connections to Babelfish server.
- Fixed an issue in column name resolution of ORDER BY clause over UNION ALL query.
- Fixed the Unrecognized object issue when dropping database.
- Fixed the crash issue when adding non string unique key.
- User defined scalar functions were created as VOLATILE by default. This fix changes the behavior such that user defined scalar functions which do not perform any DML or DDL are created as STABLE by default.
- Fixed issues in column name resolution logic for UPDATE and DELETE statements with TOP clause.

Additional improvements and enhancements

- Fixed an issue with sp_helpdb where NULL is shown for compatbility_level.
- Fixed a memory management issue with update_DropRoleStmt.
- Fixed table variables to make it immune to transaction rollback.
- The fix corrects the behavior of 'select convert(nvarchar(10),Getdate(),105)' for nvarchar datatype.
- Fixed an issue to allow UPDATE and DELETE for Table Variables inside functions.
- Made enhancement to improve the performance and avoid catalog bloat while using table variables.
- Fixed an issue in @@NEXTLEVEL which returned 1 unit larger than expected.
- Fixed an issue in sp_helpdb where input parameter's case sensitivity is not handled properly.
- Fixed an issue that COMMIT, ROLLBACK,EXECUTE, PRINT, SAVE and RAISERROR could be used in CREATE FUNCTION statement.
- Supports query timeout in sp_serveroption for OPENQUERY. For more information, see Babelfish supports linked servers.
- Fixed the case sensitivity issue in the CREATE USER for windows login.
- Fixed an issue with detecting invalid login name in CREATE LOGIN WITH WINDOWS statement.
- Fixed an issue to support INT values in JSON_MODIFY() function.
- Fixed an issue in JSON_MODIFY() function to support new value parameters as JSON_QUERY, SELECT FOR JSON, or JSON MODIFY.
- Fixed an issue in babelfishpg_tds.product_version.
- Fixed an issue in datetimeoffset operations.
- Fixed an issue for datetimeoffset default values.
- Supports numeric expressions representing datetime values.
- Fixed an issue in sys.database_principals view where the users sys and information_schema, as well as the database role public are not shown.
- Old-style T-SQL catalogs, with names starting with 'sys' (like sysprocesses) were available only in the 'sys' schema, but are now also available in the 'dbo' schema.
- Fixed an issue where a T-SQL view could be created on top of a temporary table.
- Fixed an issue that DATETIME2 doesn't accept 7 as scale argument.

Babelfish for Aurora PostgreSQL 3.1 (Deprecated)

This release of Aurora Babelfish is provided with Aurora PostgreSQL 15.2. For more information about the improvements in Aurora PostgreSQL 15.2, see Amazon Aurora PostgreSQL updates. Babelfish for Aurora PostgreSQL 3.1 adds several new features, enhancements, and fixes. For more information about Babelfish for Aurora PostgreSQL, see Working with Babelfish for Aurora PostgreSQL.

Releases

- Aurora Babelfish release 3.1.4, November 6, 2024
- Aurora Babelfish release 3.1.3, October 4, 2023
- Aurora Babelfish release 3.1.2, July 24, 2023
- Aurora Babelfish release 3.1.1, May 10, 2023
- Aurora Babelfish release 3.1.0, April 5, 2023

Aurora Babelfish release 3.1.4, November 6, 2024

Security enhancements

- Fixed an issue with dropping users and roles by non-privileged user.

Aurora Babelfish release 3.1.3, October 4, 2023

Additional improvements and enhancements

- Fixed a memory management issue with `update_DropRoleStmt`.
- Fixed a crash in `SqlBulkCopy` with heap_compute_data_size function in stacktrace when the order of columns is different compared to table defining.
- Fixed an issue that `bcp in` results in server crash when the table has large number of columns.
- Fixed issue when user mapping that is created as part of `sp_addlinkedsrvlogin` works only when OPENQUERY() and remote object referenced with a four-part object names are invoked within the master database.
- Fixed a crash in parallel query execution when `enable_pg_hint` is set to on.

Aurora Babelfish release 3.1.2, July 24, 2023

Additional improvements and enhancements

- Fixed intermittent SSL connectivity issue during concurrent connections towards Babelfish instance.
- Fixed login name case sensitivity issue with CREATE USER for windows login syntax.

Aurora Babelfish release 3.1.1, May 10, 2023

Additional improvements and enhancements

- Fixed an issue to prevent error when sequences are created in a database other than 'master'.
- Fixed a crash during bulk load operation in a specific scenario.
- Fixed an issue to prevent Babelfish instance from crashing when alter table and alter column is called with drop default where the column has no definition.

Aurora Babelfish release 3.1.0, April 5, 2023

New features

- Supports major version upgrade from Babelfish for Aurora PostgreSQL DB cluster 14.6 and 14.7 to Aurora PostgreSQL 15.2. For more information on the major version upgrade, see Upgrading your Babelfish cluster to a new version.
- Support for the following functions: STR, APP_NAME, OBJECT_DEFINITION, OBJECT_SCHEMA_NAME, ATN2, DATEDIFF_BIG functions.
- Support for the following INFORMATION_SCHEMA views: sequences, routines and schemata.
- Support sp_rename for TABLE, VIEW, PROCEDURE, FUNCTION, SEQUENCE.
- Support sys.systypes system compatibility view.
- Support for a new GUC parameter called babelfishpg_tds.product_version that allows you to set SQL Server product version number that is returned as an output by Babelfish. For more information, see Using Babelfish product version GUC.
- Added support to generate data definition scripts for various objects present in a Babelfish for Aurora PostgreSQL database. For more information, see DDL exports supported by Babelfish.
- Babelfish now supports Aurora PostgreSQL database authentication with Kerberos using AWS Directory Service for Microsoft Managed Active Directory. With this feature, for authentication

you can use Microsoft Windows Authentication when you connect to your Babelfish database. For more information, see Database authentication with Babelfish for Aurora PostgreSQL.

- Babelfish now supports linked servers from your Aurora PostgreSQL database by using the tds_fdw (TDS Foreign Data Wrapper) APG extension. Only the OPENQUERY function that executes the specified pass-through query on the specified linked server is currently supported. For more information, see Babelfish supports linked servers.

Security enhancements

- Fixed buffer overflow due to out of bound array access.

High priority stability enhancements

- Improved the performance through benefiting interactive queries, ODBC-based applications and tools such as SQL Server Management Studio. Following enhancements has been made for the same:
  - Fixed performance issues in several system functions including OBJECT_ID(), OBJECT_NAME(), SCHEMA_ID().
  - Fixed performance issues in system stored procedures sp_sproc_columns and sp_fkeys.
  - Fixed performance issues in system catalog views sys.all_views, sys.objects and sys.types.
  - Improved the performance of bulk load, parsing of T-SQL and prepared statements.
- Added a new system stored procedure sp_babelfish_volatility that you can use to set the volatility of user-defined functions to improve index use when the functions are used as part of query predicates.
- Fixed an issue where the UPDATE FROM or DELETE FROM statement that references the correlation name of the updated table raised an error.
- Fixed an issue where scope_identity function returns wrong result after exiting one scope.
- Fixed an issue where name resolution doesn't work as expected when commands are invoked from the .NET client framework.
- Fixed an issue where any index defined on column having binary/varbinary data types are not considered by the query optimizer for equality predicates.

Additional improvements and enhancements

- Fixed an issue where the statement timeout parameter for a session was not working as expected.
- Supports sequence creations using user-defined data types.
- Fixed an issue where unicode in column names, aliases or comments causes parsing errors.
- Fixed an issue where scope_identity function requires higher permission than actually needed.
- Support for the following stored procedures for working with linked servers: sp_addlinkedserver, sp_dropserver, sp_linkedservers, sp_addlinkedsrvlogin, sp_droplinkedsrvlogin, sp_helplinkedsrvlogin.
- Support for NEXT VALUE FOR function that gets the next value of a sequence. Note that this function cannot be used in some control-of-flow statements. OVER clause is also not supported.
- Fixed a crash when handling certain errors with sp_describe_undeclared_parameters.
- Fixed a rare error during Babelfish extension creation.
- Fixed an issue which was throwing an error "typename is NULL" while using TVP in sp_executesql.
- Fixed SELECT FOR XML/JSON behavior to not raise error when using SELECT with correlation name in subquery using FOR XML PATH clause.
- Fixed an issue with the SELECT FOR JSON or a SELECT FOR XML query which didn't return correct results for an empty table.
- Fixed an issue where the guest user can create objects in the wrong schema.
- Fixed schema name resolution for user defined types for param types in system stored procedures.
- Fixed an issue where applications issuing queries with more than 100 bind parameters for prepared statements were failing. This limit is now increased to 2100 to match the limits used by SQL Server.
- Fixed an issue with case handling of variable names in the sp_executesql call.
- sp_fkeys stored procedure now also returns 'deferrability' column in the result set.
- Fixed an issue in AVG aggregates which led to the termination of the connection for some integer datatypes.
- The index_id and indid column for respective views now returns the same value for indexes belonging to same object and the index_id is unique only within the object.
- Fixed an issue to not throw an error when OpenJson is called in stored procedures using nvarchar or join.

- Fixed an issue to not throw an error while using try_convert and try_cast for prohibited conversions involving some integer literals.
- Fixed an issue to allow OPENJSON WITH clause to accept a table alias.
- Support Degrees, Radians and Power functions returning the proper type.
- Fixed an issue where membership handling for sysadmin is not handled correctly.
- Fixed the default output style when converting DATE/TIME types to VARCHAR type using CONVERT function.
- Support EXECUTE AS CALLER clause in CREATE PROC/FUNCTION/TRIGGER.
- Fixed an issue where configurations are not reverted after existing sp_executesql scope.
- Fixed issues with handling cross-database access for the sys.has_perms_by_name function.
- Support the ProductLevel and ProductUpdateLevel properties for the SERVERPROPERTY function. ProductUpdateLevel always returns NULL and ProductLevel tracks the Babelfish version number closely with the T-SQL definition.
- Fixed an issue where the table variable when used as a bind parameter from client application resulted in an error.

Babelfish for Aurora PostgreSQL 2.x versions (includes some deprecated versions)

Version updates

- Babelfish for Aurora PostgreSQL 2.17
- Babelfish for Aurora PostgreSQL 2.16
- Babelfish for Aurora PostgreSQL 2.14
- Babelfish for Aurora PostgreSQL 2.13
- Babelfish for Aurora PostgreSQL 2.12
- Babelfish for Aurora PostgreSQL 2.11
- Babelfish for Aurora PostgreSQL 2.10
- Babelfish for Aurora PostgreSQL 2.9
- Babelfish for Aurora PostgreSQL 2.8
- Babelfish for Aurora PostgreSQL 2.7 (Deprecated)
- Babelfish for Aurora PostgreSQL 2.6

- Babelfish for Aurora PostgreSQL 2.5 (Deprecated)
- Babelfish for Aurora PostgreSQL 2.4 (Deprecated)
- Babelfish for Aurora PostgreSQL 2.3 (Deprecated)
- Babelfish for Aurora PostgreSQL 2.2
- Babelfish for Aurora PostgreSQL 2.1

Babelfish for Aurora PostgreSQL 2.17

This release of Aurora Babelfish is provided with Aurora PostgreSQL 14.23. For more information about the improvements in Aurora PostgreSQL 14.23, see Amazon Aurora PostgreSQL updates. Babelfish for Aurora PostgreSQL 2.17 adds several new features, enhancements, and fixes. For more information about Babelfish for Aurora PostgreSQL, see Working with Babelfish for Aurora PostgreSQL.

Aurora Babelfish release 2.17.0, August 21, 2026

Critical enhancements

- Fixed an issue that could cause crash in SPI_finish after Out Of Memory error.

Babelfish for Aurora PostgreSQL 2.16

This release of Aurora Babelfish is provided with Aurora PostgreSQL 14.22. For more information about the improvements in Aurora PostgreSQL 14.22, see Amazon Aurora PostgreSQL updates. For more information about Babelfish for Aurora PostgreSQL, see Working with Babelfish for Aurora PostgreSQL.

Aurora Babelfish release 2.16.0, April 6, 2026

Critical enhancements

- Fixed an issue where update with output clause may skip rows during concurrent updates.

Babelfish for Aurora PostgreSQL 2.14

This release of Aurora Babelfish is provided with Aurora PostgreSQL 14.19. For more information about the improvements in Aurora PostgreSQL 14.19, see Amazon Aurora PostgreSQL updates.

Babelfish for Aurora PostgreSQL 2.14 adds several new features, enhancements, and fixes. For more information about Babelfish for Aurora PostgreSQL, see Working with Babelfish for Aurora PostgreSQL.

Releases

- Aurora Babelfish release 2.14.0, November 25, 2025

Aurora Babelfish release 2.14.0, November 25, 2025

Critical enhancements

- Fixed an issue during TDS Reset Connection in certain situations

Additional improvements and enhancements

- Fixed an issue while adding a column with default value which resulted in an error

Babelfish for Aurora PostgreSQL 2.13

This release of Aurora Babelfish is provided with Aurora PostgreSQL 14.18. For more information about the improvements in Aurora PostgreSQL 14.18, see Amazon Aurora PostgreSQL updates. Babelfish for Aurora PostgreSQL 2.13 adds several new features, enhancements, and fixes. For more information about Babelfish for Aurora PostgreSQL, see Working with Babelfish for Aurora PostgreSQL.

Releases

- Aurora Babelfish release 2.13.1, August 08, 2025

Aurora Babelfish release 2.13.1, August 08, 2025

Critical stability enhancements

- Fixed an issue during TDS Reset Connection in certain situations.

Babelfish for Aurora PostgreSQL 2.12

This release of Aurora Babelfish is provided with Aurora PostgreSQL 14.17. For more information about the improvements in Aurora PostgreSQL 14.17, see Amazon Aurora PostgreSQL updates. Babelfish for Aurora PostgreSQL 2.12 adds several new features, enhancements, and fixes. For more information about Babelfish for Aurora PostgreSQL, see Working with Babelfish for Aurora PostgreSQL.

Releases

- Aurora Babelfish release 2.12.2, October 09, 2025
- Aurora Babelfish release 2.12.1, June 03, 2025
- Aurora Babelfish release 2.12, April 08, 2025

Aurora Babelfish release 2.12.2, October 09, 2025

Critical stability enhancements

- Fixed an issue during TDS Reset Connection in certain situations.

Aurora Babelfish release 2.12.1, June 03, 2025

Security enhancements

- Fixed an issue with permission check in parallel worker where non-privileged user may get read access to data in some scenarios.

Aurora Babelfish release 2.12, April 08, 2025

Critical enhancements

- Added Cleanup of stale parameters and configs in case of connection pooling.
- Added comprehensive cursor state cleanup to avoid stale data in case of connection pooling.
- Fixed a issue with `IDENTITY` columns not being recognized during `DML` statements using `OUTPUT` and `WHERE`.

High priority stability enhancements

- Fix behavior of queries which use `sys.Db_id()` function which returned empty rows in enforced parallel mode.

Babelfish for Aurora PostgreSQL 2.11

This release of Aurora Babelfish is provided with Aurora PostgreSQL 14.15. For more information about the improvements in Aurora PostgreSQL 14.15, see Amazon Aurora PostgreSQL updates. Babelfish for Aurora PostgreSQL 2.11 adds several new features, enhancements, and fixes. For more information about Babelfish for Aurora PostgreSQL, see Working with Babelfish for Aurora PostgreSQL.

Releases

- Aurora Babelfish release 2.11.3, November 13, 2025
- Aurora Babelfish release 2.11.2, June 24, 2025
- Aurora Babelfish release 2.11.1, January 20, 2025
- Aurora Babelfish release 2.11.0, December 27, 2024

Aurora Babelfish release 2.11.3, November 13, 2025

Critical stability enhancements

- Fixed an issue during TDS Reset Connection in certain situations.

Aurora Babelfish release 2.11.2, June 24, 2025

Security enhancements

- Fixed an issue with permission check in parallel worker where non-privileged user may get read access to data in some scenarios.

Aurora Babelfish release 2.11.1, January 20, 2025

High priority stability enhancements.

- Fixed an issue where transactional commands may terminate the connection in some cases.

Aurora Babelfish release 2.11.0, December 27, 2024

New features

- Enabled support of `sys.sp_reset_connection stored` proc to reset connection.

Additional improvements and enhancements

- Fixed an issue with `ISNUMERIC` function to return correct result for nvarchar/varchar parameters.
- Fixed an issue to rethrow correct TSQL error code.

Babelfish for Aurora PostgreSQL 2.10

This release of Aurora Babelfish is provided with Aurora PostgreSQL 14.13. For more information about the improvements in Aurora PostgreSQL 14.13, see Amazon Aurora PostgreSQL updates. Babelfish for Aurora PostgreSQL 2.10 adds several new features, enhancements, and fixes. For more information about Babelfish for Aurora PostgreSQL, see Working with Babelfish for Aurora PostgreSQL.

Releases

- Aurora Babelfish release 2.10.2, July 11, 2025
- Aurora Babelfish release 2.10.0, September 30, 2024

Aurora Babelfish release 2.10.2, July 11, 2025

Security enhancements

- Fixed an issue with permission check in parallel worker where non-privileged user may get read access to data in some scenarios.

Aurora Babelfish release 2.10.0, September 30, 2024

Security enhancements

- Fixed an issue that potentially allowed non-privileged users to drop other users and roles in some scenarios.

- Fixed an issue with `sys.database_principals` view where it was showing metadata related to all the users irrespective of privileges of server principal.

High Priority stability enhancements

- Fixed an issue with `information_schema.tables` returning incorrect table_name.
- Fixed an issue for the `plpgsql` extension function. The function's local settings for run-time configuration variables may not be reset at the end of function execution when Babelfish is installed.

Additional improvements and enhancements

- Fixed an issue where DML with `OUTPUT INTO` clause fired a trigger and may result in error.
- Fixed an issue when comment comes with the column name.

Babelfish for Aurora PostgreSQL 2.9

This release of Aurora Babelfish is provided with Aurora PostgreSQL 14.12. For more information about the improvements in Aurora PostgreSQL 14.12, see Amazon Aurora PostgreSQL updates. Babelfish for Aurora PostgreSQL 2.9 adds several new features, enhancements, and fixes. For more information about Babelfish for Aurora PostgreSQL, see Working with Babelfish for Aurora PostgreSQL.

Releases

- Aurora Babelfish release 2.9.3, July 17, 2025
- Aurora Babelfish release 2.9.1, September 27, 2024
- Aurora Babelfish release 2.9.0, August 8, 2024

Aurora Babelfish release 2.9.3, July 17, 2025

Security enhancements

- Fixed an issue with permission check in parallel worker where non-privileged user may get read access to data in some scenarios.

Aurora Babelfish release 2.9.1, September 27, 2024

Security enhancements

- Fixed an issue with dropping users and roles by non-privileged user.

Aurora Babelfish release 2.9.0, August 8, 2024

Critical stability enhancements

- Fixed issue producing syntax error with delimited column alias without preceding whitespace.
- Creating a user for a login is blocked when its login is already a member of sysadmin.
- Fixed the column type of the T-SQL views to use nvarchar(max).
- Fixed the `definition` column of the TSQL view `sys.sql_modules` which should have the datatype `nvarchar(max)`.

High priority stability enhancements

- Fixed an issue where Babelfish unexpectedly throws an error when connected with `pyodbc` or `sqlalchemy`.
- Fixed an issue with INSTEAD OF TRIGGER clause when same table has AFTER TRIGGER set on it.
- Fixed issue of crash under certain conditions while executing bulk copy.
- Crash in `handle_where_clause_restargets_right()`.
- Fixed a bug that could cause server restart while executing `comment on trigger` statement on Babelfish for Aurora PostgreSQL instance endpoint.
- Fixed issue with CONVERT() to return date in correct dateformat when converted to `char` and `nchar`.
- Fixed issue with insertion of datetime string with dateformat 13 into column of type `datetime`.
- Fixed several columns in `sys.index_columns` system catalog. Also fixed issue with DDL export of tables with indexes.
- Fixed an issue with ALTER TABLE ... DROP CONSTRAINT where it wasn't able to drop constraint in some cases.
- Fixed the issue of getting unexpected error `not all Parameters have names` when SP_EXECSQL contain TVP.

- Fixed an issue in handling of update or delete statements in `sp_describe_undeclared_parameters`.
- Fixed behavioral differences while CAST of string literals to `datetime`, `datetime2` and `datetimeoffset`.
- Fixed behavioral differences in COALESCE function while being called with the combination of variables and constants.

Additional improvements and enhancements

- Fixed memory leak in decimal (numeric) conversion for BCP import.
- Fixed the issue of `with tablock` hint resulting in an error for insert bulk statements.
- Added support for double-escaping and unbalanced quotes in `sp_tables table_type`.
- Added restriction on dropping of Babelfish extensions for all users except admin role.
- Prevent partial upgrades of Babelfish extensions.
- sys procedure columnproperty now support additional properties `iscomputed`, `columnid`, `ordinal`, `isidentity`.
- DDL scripting of indexes or constraints will now include correct ordering with columns.

Babelfish for Aurora PostgreSQL 2.8

This release of Aurora Babelfish is provided with Aurora PostgreSQL 14.11. For more information about the improvements in Aurora PostgreSQL 14.11, see Amazon Aurora PostgreSQL updates. Babelfish for Aurora PostgreSQL 2.8 adds several new features, enhancements, and fixes. For more information about Babelfish for Aurora PostgreSQL, see Working with Babelfish for Aurora PostgreSQL.

Releases

- Aurora Babelfish release 2.8.4, July 30, 2025
- Aurora Babelfish release 2.8.2, October 7, 2024
- Aurora Babelfish release 2.8.0, April 29, 2024

Aurora Babelfish release 2.8.4, July 30, 2025

Security enhancements

- Fixed an issue with permission check in parallel worker where non-privileged user may get read access to data in some scenarios.

Aurora Babelfish release 2.8.2, October 7, 2024

Security enhancements

- Fixed an issue with dropping users and roles by non-privileged user.

Aurora Babelfish release 2.8.0, April 29, 2024

Critical stability enhancements

- Fixed an issue in Object Explorer Database enumeration with SSMS version 19.2.
- Fixed an issue that caused error during Selecting data from variable `NVARCHAR(MAX)`, `VARCHAR(MAX)`, `VARBINARY(MAX)` with large length strings.
- Fixed blank space padding related issue in char datatype for multibyte characters.
- Fixed performance issue of enumerating tables and views in SSMS Object Explorer.

High priority stability enhancements

- Improved performance for system procedure `sp_tablecollations_100`.
- Fixed an issue with major version upgrades where views contains cast from string literal to binary type.
- Fixed a bug where parallel worker was unable to fetch the logical database name.
- Fixed the performance issue of comparing `date` to `datetime`.

Additional improvements and enhancements

- Fixed an issue on duplicate `object_id` in `sys.all_objects` after major version upgrade.
- Fixed an issue in CAST functions for `Binary` to `Varchar` and `Rowversion` to `Varchar`.
- Fixed an issue with insert into statement execution with table variable when table variable did not exist.
- Fixed an issue where input hex string being converted to type binary did not have the correct data length.

- Fixed an issue with mixed casing error in `sp_columns_100`.
- Fixed a crash in Table Variable lookup after TVP execution via `TDS RPC SPExecuteSQL`.
- Fixed Babelfish view definition table index to have correct collation when upgrading from 14.5 to 14.11.

Babelfish for Aurora PostgreSQL 2.7 (Deprecated)

This release of Aurora Babelfish is provided with Aurora PostgreSQL 14.10. For more information about the improvements in Aurora PostgreSQL 14.10, see Amazon Aurora PostgreSQL updates. Babelfish for Aurora PostgreSQL 2.7 adds several new features, enhancements, and fixes. For more information about Babelfish for Aurora PostgreSQL, see Working with Babelfish for Aurora PostgreSQL.

Releases

- Aurora Babelfish release 2.7.4, August 4, 2025
- Aurora Babelfish release 2.7.2, September 17, 2024
- Aurora Babelfish release 2.7.0, December 21, 2023

Aurora Babelfish release 2.7.4, August 4, 2025

Security enhancements

- Fixed an issue with permission check in parallel worker where non-privileged user may get read access to data in some scenarios.

Aurora Babelfish release 2.7.2, September 17, 2024

Security enhancements

- Fixed an issue with dropping users and roles by non-privileged user.

Aurora Babelfish release 2.7.0, December 21, 2023

Security enhancements

- Fixed permission issue for view sys.server_principals.

Critical stability enhancements

- Fixed an issue where ISNULL function may return incorrect data type.
- Fixed an issue where condition may be evaluated incorrectly for conditional statement like IF.
- Fixed an error "database ... does not exist" that may be observed when parallel query is enforced.
- Fixed handling of table variable or temp table when Parallel worker is enforced.
- Fixed unexpected error "lost connection to parallel worker" occurring when parallel worker is enforced.
- Fixed an issue with multiple parentheses in SELECT columns.
- Fixed an issue with handling of column name alias which may cause client to hang if column name alias contains string of length more than 64 bytes, for example, select col as '您对“数据一览“中的车型，颜色，内饰，选装, '.
- Fixed datatype of information_schema_tsql.tables.TABLE_TYPE column.
- Fixed the error - “column ... does not exist” when using table.column with alias defined for table or schema_name.table.column in set clause of update queries.
- Fixed issue of incorrect schema resolution for multiple functions in query statement.

High priority stability enhancements

- Fixed type conversion between varchar and binary datatype with use of proper encoding.
- Fixed an issue where upper/lower case may not be preserved for column name aliases.
- Fixed crash in queries involving money data-type in parallel query mode.
- Fixed failure in MVU with non-default server collation name.
- Fixed the issue of information_schema vs. sys.objects WHERE type IN ('U', 'V') giving different result in Babelfish.
- Fixed issue of sp_columns and sp_columns_100 incorrectly show NULL radix for decimal columns.
- Fixed issue in queries involving sys.format() function in parallel query mode returning error “cannot start subtransactions during a parallel operation”.
- Fixed unexpected error “could not access file "pg_hint_plan": No such file or directory" while using pg_hint_plan in parallel query mode.
- Fixed the issue of getting error ‘duplicate key value violates unique constraint ...' when re-creating a previously dropped view with the same name.

Additional improvements and enhancements

- Improved performance for stored procedure sp_describe_undeclared_parameters.
- Fixed performance issue for DATEADD(), DATEDIFF().
- SSMS - Fixed issue of stored procedure takes long time to load in Object Explorer.
- SSMS - Fixed performance issue of enumerating tables and views in SSMS Object Explorer.
- Fixed performance issue after create/upgrade of Babelfish extension by running ANALYZE after Babelfish extension creation and upgrade.
- Fixed the issue of index not used when query has an unnecessary cast to bigint.
- Fixed an issue when stored procedures starting with (sp_*) are invoked with a dbo. or sys. prefix.
- Fixed the issue with default_schema_name column of the catalog sys.babelfish_authid_user_ext in case of "guest" user.
- Fixed issue of orphan entries in sys.babelfish_view_def catalog table.

Babelfish for Aurora PostgreSQL 2.6

This release of Aurora Babelfish is provided with Aurora PostgreSQL 14.9. For more information about the improvements in Aurora PostgreSQL 14.9, see Amazon Aurora PostgreSQL updates. Babelfish for Aurora PostgreSQL 2.6 adds several new features, enhancements, and fixes. For more information about Babelfish for Aurora PostgreSQL, see Working with Babelfish for Aurora PostgreSQL.

Releases

- Aurora Babelfish release 2.6.1, November 14, 2024
- Aurora Babelfish release 2.6.0, October 24, 2023

Aurora Babelfish release 2.6.1, November 14, 2024

Security enhancements

- Fixed an issue with dropping users and roles by non-privileged user.

Aurora Babelfish release 2.6.0, October 24, 2023

New features

- Added support for TSQL function SMALLDATETIMEFROMPARTS().

Critical stability enhancements

- T-SQL trigger can't be executed when function, procedure or trigger of PostgreSQL is in execution stack.

High priority stability enhancements

- Fixed the issue of GETDATE() incorrectly returning different values in the same query.
- Fixed the issue of GETUTCDATE() incorrectly returning time of transaction instead of time of query.

Additional improvements and enhancements

- Fixed an issue where SSMS generate script for multiple views, or combining a view with other objects throws an error.
- Fixed an issue to avoid system crash while formatting `datetime` values in the results of FOR JSON or FOR XML.
- Fixed an issue to avoid system crash during table variable cleanup after a runtime error.
- Fixed an issue to avoid system crash when using certain values in nested function calls.
- Fixed an invalid memory access issue while freeing PLTSQL functions.
- Fixed a crash in `SqlBulkCopy` when the order of columns is different from the table where it is defined.
- Fixed an issue that `bcp in` results in server crash when the table has large number of columns.
- Fixed crash in parallel query when `enable_pg_hint` is turned on.
- Fixed incorrect value in procedure output parameter when procedure is called by name and is in different parameter order.
- Fixed issue where `sp_describe_first_result_set` procedure can return incorrect column order, which could cause BCP to work incorrectly.
- Fixed issue related to loss of decimal digits when converting from REAL to DECIMAL.

- Fixed error handling during the Babelfish upgrade process. Babelfish throws an error if there is a failure during the upgrade.
- Fixed an issue with sender of XML data type to handle `NULL` value where it was causing client to hang.
- Fixed an issue where USE database statement was incorrectly allowed inside the procedure, function or trigger definition.
- Fixed crash while calling T-SQL procedure from PG port when querying `sys.sysobjects`.

Babelfish for Aurora PostgreSQL 2.5 (Deprecated)

This release of Aurora Babelfish is provided with Aurora PostgreSQL 14.8. For more information about the improvements in Aurora PostgreSQL 14.8, see Amazon Aurora PostgreSQL updates. Babelfish for Aurora PostgreSQL 2.5 adds several new features, enhancements, and fixes. For more information about Babelfish for Aurora PostgreSQL, see Working with Babelfish for Aurora PostgreSQL.

Releases

- Aurora Babelfish release 2.5.2, November 12, 2024
- Aurora Babelfish release 2.5.1, October 4, 2023
- Aurora Babelfish release 2.5.0, July 13, 2023

Aurora Babelfish release 2.5.2, November 12, 2024

Security enhancements

- Fixed an issue with dropping users and roles by non-privileged user.

Aurora Babelfish release 2.5.1, October 4, 2023

High priority stability enhancements

- Fixed an issue causing crash when cursor referencing a table variable is already dropped.
- Fixed an issue where queries with UNION ALL, ORDER BY, and multiple joins could cause unavailability.
- Fixed a crash in parallel query execution when `enable_pg_hint` is set to on.

- Fixed an invalid memory access while freeing PLTSQL functions.

Additional improvements and enhancements

- Fixed an issue to avoid crash by properly handling formatting of datetime values in the results of FOR JSON or FOR XML.
- Fixed a crash in `SqlBulkCopy` when the order of columns is different compared to table defining.
- Fixed an issue that `bcp in` results in server crash when the table has large number of columns.
- Fixed incorrect value in procedure output parameter when procedure is called by name and is in different parameter order.
- Fixed a crash when dropping temp table or table variables during cleanup.
- Fixed an issue with sender of XML data type to handle NULL value where it was causing client to hang.

Aurora Babelfish release 2.5.0, July 13, 2023

Security enhancements

- Fixed an issue that non-sysadmin logins could DROP or ALTER logins.

Critical stability enhancements

- Fixed an issue when table variables may cause orphaned metadata entries.
- Fixed the issue where CTE top order handles null first behavior incorrectly.

High priority stability enhancements

- Fixed intermittent issue with concurrent SSL connections to Babelfish server.
- Fixed an issue in column name resolution of ORDER BY clause over UNION ALL query.
- Fixed the Unrecognized object issue when dropping database.
- Fixed the crash issue when adding non string unique key.

Additional improvements and enhancements

- Fixed an issue with sp_helpdb where NULL is shown for compatbility_level.
- Fixed a memory management issue with update_DropRoleStmt.
- Fixed table variables to make it immune to transaction rollback.
- The fix corrects the behavior of 'select convert(nvarchar(10),Getdate(),105)' for nvarchar datatype.
- Fixed an issue to allow UPDATE and DELETE for Table Variables inside functions.
- Made enhancement to improve the performance and avoid catalog bloat while using table variables.
- Fixed an issue in @@NEXTLEVEL which returned 1 unit larger than expected.
- Fixed an issue in sp_helpdb where input parameter's case sensitivity is not handled properly.

Babelfish for Aurora PostgreSQL 2.4 (Deprecated)

This release of Aurora Babelfish is provided with Aurora PostgreSQL 14.7. For more information about the improvements in Aurora PostgreSQL 14.7, see Amazon Aurora PostgreSQL updates. Babelfish for Aurora PostgreSQL 2.4 adds several new features, enhancements, and fixes. For more information about Babelfish for Aurora PostgreSQL, see Working with Babelfish for Aurora PostgreSQL.

Releases

- Aurora Babelfish release 2.4.4, November 6, 2024
- Aurora Babelfish release 2.4.3, October 4, 2023
- Aurora Babelfish release 2.4.2, July 24, 2023
- Aurora Babelfish release 2.4.1, May 10, 2023
- Aurora Babelfish release 2.4.0, April 5, 2023

Aurora Babelfish release 2.4.4, November 6, 2024

Security enhancements

- Fixed an issue with dropping users and roles by non-privileged user.

Aurora Babelfish release 2.4.3, October 4, 2023

- Fixed a memory management issue with `update_DropRoleStmt`.
- Fixed a crash in `SqlBulkCopy` with heap_compute_data_size function in stacktrace when the order of columns is different compared to table defining.
- Fixed an issue that `bcp in` results in server crash when the table has large number of columns.
- Fixed a crash in parallel query execution when `enable_pg_hint` is set to on.

Aurora Babelfish release 2.4.2, July 24, 2023

Additional improvements and enhancements

- Fixed intermittent SSL connectivity issue during concurrent connections towards Babelfish instance.

Aurora Babelfish release 2.4.1, May 10, 2023

Additional improvements and enhancements

- Fixed an issue to prevent error when sequences are created in a database other than 'master'.
- Fixed a crash during bulk load operation in a specific scenario.

Aurora Babelfish release 2.4.0, April 5, 2023

New features

- Supports minor version upgrade from Babelfish for Aurora PostgreSQL DB cluster 14.3 onwards to Aurora PostgreSQL 14.7. For more information on the minor version upgrade, see Upgrading Babelfish to a new minor version.
- Supports major version upgrade from Babelfish for Aurora PostgreSQL DB cluster 13.x onwards to Aurora PostgreSQL 14.7. For more information on the major version upgrade, see Upgrading Babelfish to a new major version.
- Support for the following functions: STR, APP_NAME, OBJECT_DEFINITION, OBJECT_SCHEMA_NAME, ATN2, DATEDIFF_BIG functions.
- Support for the following INFORMATION_SCHEMA views: sequences, routines and schemata.

- Support sp_rename for TABLE, VIEW, PROCEDURE, FUNCTION, SEQUENCE.
- Support sys.systypes system compatibility view.
- Support for a new GUC parameter called babelfishpg_tds.product_version that allows you to set SQL Server product version number that is returned as an output by Babelfish. For more information, see Using Babelfish product version GUC.
- Added support to generate data definition scripts for various objects present in a Babelfish for Aurora PostgreSQL database. For more information, see DDL exports supported by Babelfish.

Security enhancements

- Fixed buffer overflow due to out of bound array access.

High priority stability enhancements

- Improved the performance through interactive queries, ODBC-based applications and tools such as SQL Server Management Studio. Following enhancements has been made for the same:
  - Fixed performance issues in several system functions including OBJECT_ID(), OBJECT_NAME(), SCHEMA_ID().
  - Fixed performance issues in system stored procedures sp_sproc_columns and sp_fkeys.
  - Fixed performance issues in system catalog views sys.all_views, sys.objects and sys.types.
  - Improved the performance of bulk load, parsing of T-SQL and prepared statements.
- Added a new system stored procedure sp_babelfish_volatility that you can use to set the volatility of user-defined functions to improve index use when the functions are used as part of query predicates.
- Fixed an issue where the UPDATE FROM or DELETE FROM statement that references the correlation name of the updated table raised an error.
- Fixed an issue where scope_identity function returns wrong result after exiting one scope.
- Fixed an issue where name resolution doesn't work as expected when commands are invoked from the .NET client framework.

Additional improvements and enhancements

- Fixed an issue where the statement timeout parameter for a session was not working as expected.

- Support for sequence creations using user-defined data types.
- Fixed an issue where unicode in column names, aliases or comments causes parsing errors.
- Fixed an issue where scope_identity function requires higher permission than actually needed.
- Support for NEXT VALUE FOR function that gets the next value of a sequence. Note that this function cannot be used in some control-of-flow statements. OVER clause is also not supported.
- Fixed a crash when handling certain errors with sp_describe_undeclared_parameters.
- Fixed a rare error during Babelfish extension creation.
- Fixed an issue which was throwing an error "typename is NULL" while using TVP in sp_executesql.
- Fixed SELECT FOR XML/JSON behavior to not raise error when using SELECT with correlation name in subquery using FOR XML PATH clause.
- Fixed an issue with the SELECT FOR JSON or a SELECT FOR XML query which didn't return correct results for an empty table.
- Fixed an issue where the guest user can create objects in the wrong schema.
- Fixed schema name resolution for user defined types for param types in system stored procedures.
- Fixed the issue where applications issuing queries with more than 100 bind parameters for prepared statements were failing. This limit is now increased to 2100 to match the limits used by SQL Server.
- Fixed an issue with case handling of variable names in the sp_executesql call.
- sp_fkeys stored procedure now also returns 'deferrability' column in the result set.
- Fixed an issue in AVG aggregates which led to the termination of the connection for various integer datatypes.
- The index_id and indid column for respective views now returns the same value for indexes belonging to same object and the index_id is unique only within the object.
- Fixed an issue to not throw an error when OpenJson is called in stored procedures using nvarchar or join.
- Fixed an issue to not throw an error while using try_convert and try_cast for prohibited conversions involving int literals.
- Fixed an issue to allow OPENJSON WITH clause to accept a table alias.
- Support Degrees, Radians and Power functions returning the proper type.
- Fixed an issue where membership handling for sysadmin is not handled correctly.

- Fixed the default output style when converting DATE/TIME types to VARCHAR type using CONVERT function.
- Support EXECUTE AS CALLER clause in CREATE PROC/FUNCTION/TRIGGER.
- Fixed an issue where configurations are not reverted after existing sp_executesql scope.
- Fixed issues with handling cross-database access for the sys.has_perms_by_name function.
- Support the ProductLevel and ProductUpdateLevel properties for the SERVERPROPERTY function. ProductUpdateLevel always returns NULL and ProductLevel tracks the Babelfish version number closely with the T-SQL definition.
- Fixed an issue where the table variable when used as a bind parameter from client application resulted in an error.

Babelfish for Aurora PostgreSQL 2.3 (Deprecated)

This release of Aurora Babelfish is provided with Aurora PostgreSQL 14.6. For more information about the improvements in Aurora PostgreSQL 14.6, see Amazon Aurora PostgreSQL updates. Babelfish for Aurora PostgreSQL 2.3 adds several new features, enhancements, and fixes. For more information about Babelfish for Aurora PostgreSQL, see Working with Babelfish for Aurora PostgreSQL.

Releases

- Aurora Babelfish release 2.3.4, November 18, 2024
- Aurora Babelfish release 2.3.3, September 13, 2023
- Aurora Babelfish release 2.3.2, March 3, 2023
- Aurora Babelfish release 2.3.0, January 20, 2023

Aurora Babelfish release 2.3.4, November 18, 2024

Security enhancements

- Fixed an issue with dropping users and roles by non-privileged user.

Aurora Babelfish release 2.3.3, September 13, 2023

Additional improvements and enhancements

- Fixed a rare error during Babelfish extension creation.
- Fixed a memory management issue with `update_DropRoleStme`.

Aurora Babelfish release 2.3.2, March 3, 2023

Security enhancements

- Fixed buffer overflow due to out of bound array access.

Aurora Babelfish release 2.3.0, January 20, 2023

New features

- Supports major version upgrade from Babelfish for Aurora PostgreSQL DB cluster 13.6 and later to Aurora PostgreSQL 14.6. For more information on the major version upgrade, see Upgrading your Babelfish cluster to a new version.
- Support for T-SQL hints (join methods, index usage, MAXDOP). For more information on the T-SQL hints supported by Babelfish, see Using T-SQL query hints to improve Babelfish query performance.
- Babelfish now supports Zero-downtime patching (ZDP). For more information, see Minor release upgrades and zero-downtime patching in the *Amazon Aurora User Guide*.
- Support for FORMAT() T-SQL function with minor limitations.
- Support the estimated execution plans for THROW, PRINT, USE, and RAISEERROR statements.
- Support for JSON_MODIFY function in Babelfish which updates the value of a property in a JSON string and returns the updated JSON string.
- Support the VALUES() constructor in FROM clause in a SELECT statement.
- Support sp_addrole, sp_droprole, sp_addrolemember, sp_droprolemember procedures to create or alter a role.
- Support for sys.all_parameters catalog view.
- Support guest user in all the user created databases and support GRANT/CONNECT TO/FROM user (including guest).

- Support sp_helpdbfixedrole and DATETIMEOFFSETFROMPARTS functions.

High priority stability enhancements

- Improved performance for INSERT statement with IDENTITY_INSERT=ON.
- Fixed an issue where "DROP DATABASE" statement fails due to incorrect comparison operator used.
- Fixed an issue where numeric overflow error was not handled properly for numeric types.
- Fixed an issue where DB owner is not considered as dbo in its own DB.
- Fixed issues with SSL handshake failure and added a few other improvements.
- Fixed the sys.all_objects view to correctly identify inline table-valued functions (IF) and table-valued functions (TF) which were previously reported as scalar functions (FN). Similar issue is fixed for the IsInlineFunction property of the OBJECTPROPERTY function.
- Fixed an issue where DBO is assumed member of a DB role incorrectly.
- Fixed an issue where member of sysadmin could not connect through SSMS.
- Corrected the schema name resolution for triggers and views so that it selects/modifies the correct object(tables).
- Fixed the mapping consistency in catalog when creating roles with names in upper/lower case.
- Fixed an issue where drop database is blocked after access denial to other logins due to in sufficient permission.
- Fixed the default collation of Babelfish data types except TEXT and NTEXT to be the same as that mentioned in the babelfishpg_tsql.server_collation_name parameter. For more information, see Default Collation in Babelfish.
- Fixed the cross-DB references to tempdb.sys.objects for correct results.

Additional improvements and enhancements

- Fixed an issue to make trigger names unique for each database.
- Fixed an issue in sp_tables when it is invoked from JDBC metadata functions.
- Fixed an issue when CHECK constraints are used with LIKE condition.
- Performance improvements with sp_sproc_columns when dealing with stored procedures.
- sp_sproc_columns now includes table-valued parameter row for stored procedures that use TVP as a parameter.

- Fixed the cross-DB references to INFORMATION_SCHEMA.ROUTINES and tempdb.sys.objects to give the correct results.
- Fixed issues to support datetime/smalldatetime operation with various numeric and non numeric datatypes.
- Fixed the return values of SUM aggregates for integer datatypes to return the correct datatypes.
- Fixed an issue when UPDATE/DELETE is used with table aliases.
- Support added for sysobjects.crdate (create_date) for all user defined tables, views, procedures, functions, triggers and table types.
- Procedure/function call is not allowed when required parameter is missing and an explicit error is raised.
- Fixed issue to calculate the day difference and the hour difference, without considering timestamp (i.e., hh:mm:ss.msec).
- Fixed an issue with DATEDIFF() function to return correct results between two input dates regardless of the input parameters.
- Fixed an issue with DATEADD() function when used with the 'nanosecond' units.
- Fixed an issue with DATEPART(), DATENAME(), DATEDIFF() and DATEADD() functions when used with 'w' units
- Fixed an issue with DATEPART() and DATENAME() to allow units 'y'.
- Fixed issues with DATEPART(), DATENAME(), DATEDIFF() and DATEADD() functions to convert string to datetime and to recognize mi units.
- Support for TRY_CONVERT() function.
- Fixed issue with using strict/lax jsonpath with arrays to avoid OPENJSON error: "syntax error at or near " " of jsonpath input".
- Support UDF (User Defined Function) as column default in ALTER TABLE statement.
- Fixed an issue when SUBSTRING() takes NULL arguments.
- Support for cast operations to SMALLDATETIME from various numeric types.
- Fixed an issue where dbname parameter is not handled properly for sp_helpdb.
- Fixed an issue where DB owner is allowed to create another user for itself.
- Fixed an issue where trailing spaces are not ignored in sp_helpsrvrolemember and IS_ROLEMEMBER/IS_MEMBER functions.
- Improved error message for unsupported data types: HIERARCHYID, GEOGRAPHY, GEOMETRY.

- Fixed issues where cross database procedure calls and sp_ procedures access from other databases should succeed even without EXECUTE keyword.
- Fixed an issue where user 'guest' is not dropped in any database, but only disabled.
- Fixed the column value for SID in the procedure sp_helpuser when the user is guest.
- Fixed an issue where overflow/underflow is not getting handled with money datatype.
- Fixed an issue where error is not getting handled while error processing in tds.
- Fixed a better error message for CREATE USER WITHOUT LOGIN.
- Fixed an issue where sp_helpsrvrolemember is throwing unsupported errors for unsupported server level roles.
- Fixed an issue where SET BABELFISH_STATISTICS PROFILE shows planning and execution times.
- Corrected the schema name resolution for Babelfish objects like views and triggers, so that correct object is selected or modified.
- Support rowversion/timestamp Datatype for Insert Bulk.
- In Babelfish, sp_babelfish_configure supports enable_pg_hint and explain-related configurations by turning them "on/off". Accepting "ignore/strict" option is allowed when there are multiple matches while using sp_babelfish_configure.
- Support to Keep Nulls (-k) bcp option for optimized implementation to insert Bulk.
- Support multi-byte currency symbols to use with money data type.
- Fixed issue for dotnet clients (including SSMS) that received invalid precision/scale error for certain arithmetic expressions.
- Fixed the sys.all_objects view to correctly identify inline table-valued functions (IF) and table-valued functions (TF) which were previously reported as scalar functions (FN). Fixed similar issue for the IsInlineFunction property of the OBJECTPROPERTY function.
- Fixed an issue where the is_member function returns an incorrect result for certain roles.
- Improvements in FOR JSON PATH clause of SELECT statement which supports ROOT, INCLUDE_NULL_VALUES, WITHOUT_ARRAY_WRAPPER.
- Supports a new escape hatch, 'escape_hatch_checkpoint' with a default pf 'ignore'. This escape hatch allows the use of CHECKPOINT statement in the procedural code, but the CHECKPOINT statement is currently not implemented.

Babelfish for Aurora PostgreSQL 2.2

This release of Aurora Babelfish is provided with Aurora PostgreSQL 14.5. For more information about the improvements in Aurora PostgreSQL 14.5, see Amazon Aurora PostgreSQL updates. Babelfish for Aurora PostgreSQL 2.2 adds several new features, enhancements, and fixes. For more information about Babelfish for Aurora PostgreSQL, see Working with Babelfish for Aurora PostgreSQL.

Releases

- Aurora Babelfish release 2.2.3, October 17, 2023
- Aurora Babelfish release 2.2.2, March 2, 2023
- Aurora Babelfish release 2.2.1, December 13, 2022
- Aurora Babelfish release 2.2.0, November 9, 2022

Aurora Babelfish release 2.2.3, October 17, 2023

High priority stability enhancements

- Fixed issues with SSL handshake failure and added a few other improvements.

Additional improvements and enhancements

- Fixed a memory management issue with `update_DropRoleStmt`.

Aurora Babelfish release 2.2.2, March 2, 2023

Security enhancements

- Fixed buffer overflow due to out of bound array access.

Aurora Babelfish release 2.2.1, December 13, 2022

- Fixed an issue that prevented the use of collations like Chinese_PRC_CI_AS, Japanese_CI_AS and so on for babelfishpg_tsql.server_collation_name.

Aurora Babelfish release 2.2.0, November 9, 2022

Security enhancements

- Fixed critical issues in Babelfish due to incorrect handling of user input for some application features. This is tracked in https://github.com/babelfish-for-postgresql/babelfish_extensions/security/advisories/GHSA-m399-rrc8-j6fj.

High priority stability enhancements

- Fixed error handling in sp_prepare calls which can cause a server crash when a large number of parameters are sent by the application. Babelfish currently supports a maximum of 100 parameters for a procedure or function.
- Fixed error handling in SSL/TLS handshake for some client drivers.
- Fixed an issue where a login can access the database without creating DB user after the DROP/CREATE of login.
- Fixed an issue where a login isn't dropped if it is logged in on any session.

New features

- Support for data migration using the BCP client and the bcp utility now supports -E flag (for identity columns) and -b flag (for batching inserts).
- Support for cross-database stored procedure execution.
- Support for CROSS APPLY and OUTER APPLY (lateral join).
- Support for built-in functions SYSTEM_USER, HOST_NAME; the Hostname is visible in the sys.sysprocesses T-SQL view; the SID_BINARY function is supported but always returns NULL in Babelfish.
- Support for CAST function of numeric expressions to DATETIME.
- Support for @@LANGUAGE variable with constant value as 'us_english'.
- Support for the old-style function calls with '::' preceding the function name.
- Support for the sp_helpsrvrolemember stored procedure.
- Support for the msdb.dbo.fn_syspolicy_is_automation_enabled system function.
- Support for more catalogs: assembly_types, numbered_procedures, triggers, spatial_index_tessellations, plan_guides, synonyms, events, trigger_events, fulltext_indexes, dm_hadr_cluster, xml_indexes, change_tracking_tables, key_constraints,

database_filestream_options, filetable_system_defined_objects, hash_indexes, filegroups, master_files, assembly_modules, change_tracking_databases, database_recovery_status, fulltext_catalogs, fulltext_stoplists, fulltext_indexes, fulltext_index_columns, fulltext_languages, selective_xml_index_paths, spatial_indexes, filetables, registered_search_property_lists, syspolicy_configuration, syspolicy_system_health_state.

- Support for new INFORMATION_SCHEMA catalogs: COLUMN_DOMAIN_USAGE, CONSTRAINT_COLUMN_USAGE, CHECK_CONSTRAINTS, ROUTINES, VIEWS.
- Support for new PG-style query plan: escape hatch 'babelfish_pgtsql.escape_hatch_showplan_all'.
  - when set to 'ignore', SET SHOWPLAN_ALL and SET STATISTICS PROFILE behaves as SET BABELFISH_SHOWPLAN_ALL and SET BABELFISH_STATISTICS PROFILE.
  - when set to 'strict', SET SHOWPLAN_ALL and SET STATISTICS PROFILE are silently ignored.
- Support for executing stored procedures with the sp_ prefix in the master database without using a three-part name.

Additional improvements and enhancements

- Fixed an issue where a value of 1900-01-01 00:00:00 was stored when a NULL was inserted or updated into a datetime column. A NULL value is inserted now. Column values in tables created in a previous Babelfish release are not affected.
- TIME datatypes that return 7 digits in SQL Server now returns 7 digits in Babelfish as well, with the 7th digit always being zero. In addition, a rounding issue that sometimes affected the 6th digit has been resolved.
- Increased parameter lengths for @tsql and @params for sp_describe_first_result_set from nvarchar(384) to nvarchar(8000). This increases the number of columns the DMS Babelfish target endpoint can support from 25 to 1000.
- Improved performance for system stored procedures: sys.sp_tablecollations_100, sp_columns_managed, and sp_describe_undeclared_parameters. This fix improves the performance of the DMS Babelfish target endpoint, SQL Server Management Studio import and export wizard, and prevents timeouts.
- Fixed an issue with Bitwise NOT ~ operator and it returns the correct result with BIT data types now.
- Fixed an issue with BCP when it is used for tables that have triggers.
- Fixed an issue of backend failure in INSERT BULK when using Import-Export wizard.

- Fixed an issue where SQL Server Management Studio (SSMS) returns an error while expanding "Triggers" for a table in the Object Explorer view.
- Fixed an issue where the name column in the sys.sysobjects view was using case sensitive collation.
- Fixed an issue to refer SQL objects inside a function and is resolved to the function's schema rather than the default schema of the user.
- Fixed an issue where a backend crash can occur when using the ISNULL function with CONVERT on computed columns.
- Fixed an issue with the DATEPART function when the date argument is a string literal.
- Fixed an issue where a role can be dropped even if it has members.
- Fixed an issue so that the db user can't add to a role or drop from a role.
- Fixed an issue to allow BCP to work correctly with collations other than English collations.
- Fixed an issue to make sp_helpuser procedure show login name for dbo user.
- Fixed an issue to handle NULL and mix-cased inputs correctly for the functions SUSER_SNAME and SUSER_SID.
- Fixed an issue with Babelfish returning an invalid TDS protocol stream when there is a numeric overflow error.
- Fixed an issue where is_fixed_role column returns incorrect value in the sys.server_principals view for the 'sysadmin' role.
- Fixed the transaction error handling in a batch if the string passed to execute contains a USE dbname and fails because the database dbname was not found.
- Fixed the issue with procedures created in master database context with prefix sp_ that are not accessible from other database context.
- Fixed the failure to resolve object name inside a procedure when used with schema name.
- Fixed case-sensitivity issue with arguments to the functions USER_ID and SUSER_ID.
- Fixed an issue where triggers were allowed to be created on Babelfish temporary tables.
- Fixed several performance issues with Import-Export wizard.
- Support for multi-byte client encodings other than UTF-16 for VARCHAR(n).
- Fixed the system compatibility view sys.sysprocesses to show the correct value for hostname provided by the client connection.
- Fixed case sensitivity issue with Polish_CI_AS collation.

- Fixed the @@DBTS function so that value of @@DBTS correctly returns the current transaction id after each DML statement even when used within a transaction.
- Improved performance for queries that refer to the functions SCOPE_IDENTITY and @@IDENTITY.
- Support added for collations Japanese_CS_AS, Japanese_CI_AI and Japanese_CI_AS for fn_helpcollations.
- @@SERVERNAME and SERVERPROPERTY('ServerName') now return the name of the Babelfish instance as specified by the user when the instance is created. This value is also returned by the newly supported properties SERVERPROPERTY('MachineName') and SERVERPROPERTY('InstanceName').
- Function fn_mapped_system_error_list lists the PG error code mapped to @@ERROR codes, as well as the corresponding error message text. This function also exists in previous Babelfish releases but did not include mapping details.
- Fixed DATEADD function to now support milliseconds(ms) time units.
- SET NO_BROWSETABLE {ON|OFF} is now subject to escape hatch escape_hatch_session_settings, so no error is raised when set to ignored.
- SET PARSEONLY {ON|OFF} is now supported. Previously this would raise an error unless escape hatch escape_hatch_session_settings is set to ignored.
- The DATABASE_DEFAULT AND CATALOG_DEFAULT collation is now supported; this refers to the server/instance-level collation that was specified when the Babelfish instance was created, as Babelfish doesn't currently support collations on database level.
- For the functions OBJECTPROPERTY and OBJECTPROPERTYEX, the following properties are now supported: ExecIsAnsiNullsOn, ExecIsQuotedIdentOn, IsDefault, IsDefaultCnst, IsDeterministic, IsIndexed, IsInlineFunction, IsMSShipped, IsPrimaryKey, IsProcedure, IsRule, IsScalarFunction, IsSchemaBound, IsTable, IsTableFunction, IsTrigger, IsUserTable, IsView, OwnerId, TableFulltextPopulateStatus, TableHasVarDecimalStorageFormat.
- OBJECTPROPERTYEX function supports the BaseType property.
- INDEXPROPERTY function supports the following properties: IndexFillFactor, IndexID, IsClustered, IsDisabled, IsHypothetical, IsPadIndex, IsPageLockDisallowed, IsRowLockDisallowed, IsUnique.

Babelfish for Aurora PostgreSQL 2.1

This release of Aurora Babelfish is provided with Aurora PostgreSQL 14.3 and 14.4. For more information about the improvements in Aurora PostgreSQL 14.3 and 14.4, see Amazon Aurora PostgreSQL updates. Babelfish for Aurora PostgreSQL 2.1 adds several new features, enhancements, and fixes. For more information about Babelfish for Aurora PostgreSQL, see Working with Babelfish for Aurora PostgreSQL.

Releases

- Babelfish for Aurora PostgreSQL release 2.1.2, October 18, 2022
- Babelfish for Aurora PostgreSQL release 2.1.1, July 6, 2022
- Babelfish for Aurora PostgreSQL release 2.1.0, June 21, 2022

Babelfish for Aurora PostgreSQL release 2.1.2, October 18, 2022

Security enhancements

- Fixed critical issues in Babelfish due to incorrect handling of user input for some application features. This is tracked in https://github.com/babelfish-for-postgresql/babelfish_extensions/security/advisories/GHSA-m399-rrc8-j6fj.

High priority stability enhancements

- Fixed error handling in sp_prepare calls which can cause a server crash when a large number of parameters are sent by the application. Babelfish currently supports a maximum of 100 parameters for a procedure or function.
- Fixed error handling in SSL/TLS handshake for some client drivers.

Babelfish for Aurora PostgreSQL release 2.1.1, July 6, 2022

- Fixed the babelfishpg_tds extension to correctly allocate the shared memory size used by the extension.

Babelfish for Aurora PostgreSQL release 2.1.0, June 21, 2022

Babelfish DB clusters running on Aurora PostgreSQL 13.7 or older versions can't be upgraded to Aurora PostgreSQL 14.3 with Babelfish 2.1.0.

New features

- Support for data migration using the bcp client utility, as an experimental feature. Some bcp options (-b, -C, -E, -G, -h, -K, -k, -q, -R, -T, -V) are not currently supported.
- Support for connecting with the SSMS object explorer connection dialog (rather than only the Query Editor connection dialog), as well as partial support for the SSMS object explorer itself.
- Improved support for data migration with the SSMS Import/Export Wizard.
- Support for IS_MEMBER, IS_ROLEMEMBER, and HAS_PERMS_BY_NAME functions.
- Support for syslanguages, sys.indexes, sys.all_views, sys.database_files, sys.sql_modules, sys.system_sql_modules, sys.all_sql_modules, sys.xml_schema_collections, sys.dm_hadr_database_replica_states, sys.data_spaces, sys.database_mirroring, sys.database_role_members catalogs.
- Support for sp_sproc_columns, sp_sproc_columns_100, sp_helprole, sp_helprolemember system stored procedures.
- Support for Japanese_CS_AS, Japanese_CI_AI, Japanese_CI_AS collations.
- Babelfish now supports CHARINDEX substring searches on systems using nondeterministic collations.
- Babelfish now supports PATINDEX, and supports arguments to STRING_SPLIT that are collated using a case-insensitive collation.
- Query plan output is generated following SET BABELFISH_SHOWPLAN_ALL ON (and OFF) and SET BABELFISH_STATISTICS PROFILE ON (OFF). This will generate PostgreSQL-style query plan information for T-SQL queries in Babelfish. Make sure these SET statements are identical to existing T-SQL statements, but with the added BABELFISH_ prefix.

Additional improvements and enhancements

- Cross–database references outside the current database, with a 3-part object name, for SELECT,SELECT..INTO, INSERT, UPDATE, DELETE.
- CREATE ROLE (AUTHORIZATION clause not supported), DROP ROLE, ALTER ROLE.

- Babelfish now maps the error code for @@ERROR=213. For more information on error handling, see Managing Babelfish error handling.
- Fixed an issue with SUBSTRING(CHARINDEX()) variable assignment that caused Babelfish to become unavailable.
- Fixed an issue with INSERT INTO...with OUTPUT clause that resulted in a `Number of given values doesn't match target table definition` error.
- Fixed an issue that caused DELETE with OUTPUT INTO temporary table statements to return a `WITH query 'nnnnnnnnnnn' doesn't have a RETURNING clause` error.
- Fixed an issue that caused LEFT OUTER JOIN to fail with a `Sqlcmd: Error: Internal error at ReadAndHandleColumnData (Reason: Error reading column data)` error. This issue was a regression introduced in Babelfish 1.1.0. If your Babelfish for Aurora PostgreSQL DB cluster runs Babelfish version 1.1.0 and you get this error, we recommend that you upgrade to Aurora PostgreSQL 13.7 to obtain this fix.
- Fixed an invalid syntax error using the GETUTCDATE() and SYSUTCDATETIME() built-in functions.
- Fixed an issue where numeric overflow conditions using SUM() and AVG() functions caused a TDS error.
- Fixed an issue with .NET applications calling store procedures for a DataTable object that resulted in a datatype mismatch and disallowed implicit casting error.

Babelfish for Aurora PostgreSQL 1.x versions (includes some deprecated versions)

Version updates

- Babelfish for Aurora PostgreSQL 1.5
- Babelfish for Aurora PostgreSQL 1.4 (Deprecated)
- Babelfish for Aurora PostgreSQL 1.3 (Deprecated)
- Babelfish for Aurora PostgreSQL 1.2 (Deprecated)
- Babelfish for Aurora PostgreSQL 1.1 (Deprecated)
- Babelfish for Aurora PostgreSQL 1.0 (Deprecated)

Babelfish for Aurora PostgreSQL 1.5

This release of Aurora Babelfish is provided with Aurora PostgreSQL 13.9. For more information about the improvements in Aurora PostgreSQL 13.9, see Amazon Aurora PostgreSQL updates. Babelfish for Aurora PostgreSQL 1.5 adds a new feature and an enhancement. For more information about Babelfish for Aurora PostgreSQL, see Working with Babelfish for Aurora PostgreSQL.

Releases

- Aurora Babelfish release 1.5.0, January 20, 2023

Aurora Babelfish release 1.5.0, January 20, 2023

New features

- Babelfish now supports Zero-downtime patching (ZDP). For more information, see Minor release upgrades and zero-downtime patching in the *Amazon Aurora User Guide*.

High priority stability enhancements

- Fixed an issue related to money operator class during minor version upgrade from 13.4 to 13.5 or later due to which the upgrade was failing.

Babelfish for Aurora PostgreSQL 1.4 (Deprecated)

This release of Aurora Babelfish is provided with Aurora PostgreSQL 13.8. For more information about the improvements in Aurora PostgreSQL 13.8, see Amazon Aurora PostgreSQL updates. The following issues are resolved in Babelfish for Aurora PostgreSQL 1.4 release. For more information about Babelfish for Aurora PostgreSQL, see Working with Babelfish for Aurora PostgreSQL.

Releases

- Aurora Babelfish release 1.4.1, December 13, 2022
- Aurora Babelfish release 1.4.0, November 9, 2022

Aurora Babelfish release 1.4.1, December 13, 2022

- Fixed an issue that prevented successful minor version upgrade from Babelfish for Aurora PostgreSQL 13.4 DB cluster to Aurora PostgreSQL 13.8.

Aurora Babelfish release 1.4.0, November 9, 2022

Security enhancements

- Fixed critical issues in Babelfish due to incorrect handling of user input for some application features. This is tracked in https://github.com/babelfish-for-postgresql/babelfish_extensions/security/advisories/GHSA-m399-rrc8-j6fj.

High priority stability enhancements

- Fixed error handling in sp_prepare calls which can cause a server crash when a large number of parameters are sent by the application. Babelfish currently supports a maximum of 100 parameters for a procedure or function.
- Fixed error handling in SSL/TLS handshake for some client drivers.

Additional improvements

- Fixed the babelfishpg_tds extension to correctly allocate the shared memory size used by the extension.

Babelfish for Aurora PostgreSQL 1.3 (Deprecated)

This release of Aurora Babelfish is provided with Aurora PostgreSQL 13.7. For more information about the improvements in Aurora PostgreSQL 13.7, see Amazon Aurora PostgreSQL updates. The following issues are resolved in Babelfish for Aurora PostgreSQL 1.3 release. For more information about Babelfish for Aurora PostgreSQL, see Working with Babelfish for Aurora PostgreSQL.

Releases

- Babelfish for Aurora PostgreSQL release 1.3.3, December 14, 2022
- Babelfish for Aurora PostgreSQL release 1.3.2, October 18, 2022
- Babelfish for Aurora PostgreSQL release 1.3.1, July 6, 2022

- Babelfish for Aurora PostgreSQL release 1.3.0, June 9, 2022

Babelfish for Aurora PostgreSQL release 1.3.3, December 14, 2022

- Fixed an issue that prevented successful minor version upgrade from Babelfish for Aurora PostgreSQL 13.4 DB cluster to Aurora PostgreSQL 13.7.

Babelfish for Aurora PostgreSQL release 1.3.2, October 18, 2022

Security enhancements

- Fixed critical issues in Babelfish due to incorrect handling of user input for some application features. This is tracked in https://github.com/babelfish-for-postgresql/babelfish_extensions/security/advisories/GHSA-m399-rrc8-j6fj.

High priority stability enhancements

- Fixed error handling in sp_prepare calls which can cause a server crash when a large number of parameters are sent by the application. Babelfish currently supports a maximum of 100 parameters for a procedure or function.
- Fixed error handling in SSL/TLS handshake for some client drivers.

Babelfish for Aurora PostgreSQL release 1.3.1, July 6, 2022

- Fixed the babelfishpg_tds extension to correctly allocate the shared memory size used by the extension.

Babelfish for Aurora PostgreSQL release 1.3.0, June 9, 2022

- Fixed an issue with SUBSTRING(CHARINDEX()) variable assignment that caused Babelfish to become unavailable.
- Fixed an issue with INSERT INTO...with OUTPUT clause that resulted in a `Number of given values doesn't match target table definition` error.
- Fixed an issue that caused DELETE with OUTPUT INTO temporary table statements to return a `WITH query 'nnnnnnnnnnn' doesn't have a RETURNING clause` error.

- Fixed an issue that caused LEFT OUTER JOIN to fail with a `Sqlcmd: Error: Internal error at ReadAndHandleColumnData (Reason: Error reading column data)` error. This issue was a regression introduced in Babelfish 1.1.0. If your Babelfish for Aurora PostgreSQL DB cluster runs Babelfish version 1.1.0 and you get this error, we recommend that you upgrade to Aurora PostgreSQL 13.7 to obtain this fix.

Babelfish for Aurora PostgreSQL 1.2 (Deprecated)

This release of Babelfish is provided with Aurora PostgreSQL 13.6. For more information about the improvements in Aurora PostgreSQL 13.6, see Amazon Aurora PostgreSQL updates. The following issues are resolved in Babelfish 1.2 release. For more information about Babelfish, see Working with Babelfish for Aurora PostgreSQL.

Releases

- Babelfish for Aurora PostgreSQL release 1.2.4, December 15, 2022
- Babelfish for Aurora PostgreSQL release 1.2.3, October 18, 2022
- Babelfish for Aurora PostgreSQL release 1.2.2, July 18, 2022
- Babelfish for Aurora PostgreSQL release 1.2.1, April 27, 2022
- Babelfish for Aurora PostgreSQL release 1.2.0, March 29, 2022

Babelfish for Aurora PostgreSQL release 1.2.4, December 15, 2022

- Fixed an issue that prevented successful minor version upgrade from Babelfish for Aurora PostgreSQL 13.4 DB cluster to Aurora PostgreSQL 13.6.

Babelfish for Aurora PostgreSQL release 1.2.3, October 18, 2022

Security enhancements

- Fixed critical issues in Babelfish due to incorrect handling of user input for some application features. This is tracked in https://github.com/babelfish-for-postgresql/babelfish_extensions/security/advisories/GHSA-m399-rrc8-j6fj.

Babelfish for Aurora PostgreSQL release 1.2.2, July 18, 2022

- Fixed an issue causing outer join queries to sometimes fail with an internal error message.

- Fixed the babelfishpg_tds extension to correctly allocate the shared memory size used by the extension.

Babelfish for Aurora PostgreSQL release 1.2.1, April 27, 2022

- Fixed an issue that caused Babelfish to become unavailable after working with temporary tables.
- Fixed an issue that prevented successful minor version upgrade from a Babelfish for Aurora PostgreSQL 13.4 or 13.5 DB cluster to Aurora PostgreSQL 13.6.
- Fixed an issue that prevented transferring data to a table with identity columns using the SQL Server Management Studio import and export wizard.

Babelfish for Aurora PostgreSQL release 1.2.0, March 29, 2022

In addition to the new features and improvements in the following list, Babelfish for Aurora PostgreSQL 1.2.0 adds several features that currently have limited implementations. These features are available for use but don't yet have complete parity with T-SQL syntax or Microsoft SQL Server. For more information, see Features with limited implementation.

- Casing (upper-case, lower-case) of column names as created with T-SQL is now retained. That is, `SELECT * FROM table` returns the column names using the same casing as used when the table was created at the TDS endpoint.
- INSTEAD-OF triggers are now supported on tables (tables only, not views).
- Support for system-defined global variables @@DBTS, @@LOCK_TIMEOUT, @@SERVICENAME.
- Support for syntax SET LOCK_TIMEOUT.
- Support for datatypes TIMESTAMP and ROWVERSION.
- Support for built-in functions COLUMNS_UPDATED, UPDATE, FULLTEXTSERVICEPROPERTY, ISJSON, JSON_QUERY, JSON_VALUE, HAS_DBACCESS, SUSER_SID, SUSER_SNAME, IS_SRVROLEMEMBER.
- Full support for the CHECKSUM function. This function now supports * and multiple columns (`CHECKSUM ( * | expression [ ,...n ] )`).
- Full support for the SCHEMA_ID function. This function can now be used without any arguments (`SCHEMA_ID ( [ schema_name ] )`).
- Support for DROP IF EXISTS with SCHEMA, DATABASE, and USER objects.

- Support for these additional values for CONNECTIONPROPERTY: physical_net_transport and client_net_address.
- Support for the these SERVERPROPERTY values: EditionID, EngineEdition, LicenseType, ProductVersion, ProductMajorVersion, ProductMinorVersion, IsIntegratedSecurityOnly, IsLocalDB, IsAdvancedAnalyticsInstalled, IsBigDataCluster, IsPolyBaseInstalled, IsFullTextInstalled, and IsXTPSupported.
- Support for these catalogs: sys.dm_os_host_info, sys.dm_exec_sessions, sys.dm_exec_connections, sys.endpoints, sys.table_types, sys.database_principals, sys.sysprocesses, sys.sysconfigures, sys.syscurconfigs, and sys.configurations.
- Support for these INFORMATION_SCHEMA catalogs: TABLES, COLUMNS, DOMAINS, and TABLE_CONSTRAINTS.
- Support for these system stored procedures: sp_table_privileges, sp_column_privileges, sp_special_columns, sp_fkeys, sp_pkeys, sp_stored_procedures, xp_qv, sp_describe_undeclared_parameters, and sp_helpuser.
- Limited support for creating, altering, and dropping database principals (USER objects). Limitations for CREATE/ALTER/DROP syntax with USER objects are as follows:
  - For CREATE USER, you can specify the FOR/FROM LOGIN and DEFAULT_SCHEMA options only.
  - For ALTER USER, you can specify DEFAULT_SCHEMA option only.
- Limited support for the SET FMTONLY ON command. Setting this command ON suppresses the execution of SELECT statements only. It doesn't suppress the execution of other statements.
- Support for granting and revoking (GRANT/REVOKE) permisions for database principals only (not database roles). Support includes GRANT OPTION and REVOKE..CASCADE options for SELECT, INSERT, UPDATE, DELETE, REFERENCES, EXECUTE, and ALL [PRIVILEGES].
- Support for WITH AUTHORIZATION on CREATE SCHEMA.
- Support for the following new escape hatches and escape hatch functionality:
  - Restore all default settings for escape hatches for your Babelfish DB instance by passing `default` as the second argument to the `sp_babelfish_configure` stored procedure.
  - A new escape hatch, `escape_hatch_ignore_dup_key` (default=strict) controls the IGNORE_DUP_KEY option in CREATE/ALTER TABLE and CREATE INDEX statements. When IGNORE_DUP_KEY=ON, an error is raised unless escape_hatch_ignore_dup_key is set to `'ignore'`.
  - Added support for the `ignore` option on the `escape_hatch_storage_options` escape hatch. When set to `ignore`, Babelfish ignores errors raised in the following cases:

- Ignores errors raised in the ON clause in a CREATE DATABASE statement.
- Ignores errors raised by CREATE INDEX when used with SORT_IN_TEMPDB, DROP_EXISTING, or ONLINE options.

For details, see Managing Babelfish error handling.

- The msdb system database is always present, and has dbid=4. For more information, see Babelfish architecture.
- For a list of features supported in each Babelfish release, see Supported functionality in Babelfish by version.

Babelfish for Aurora PostgreSQL 1.1 (Deprecated)

This release of Babelfish is provided with Aurora PostgreSQL 13.5. For more information about the improvements in Aurora PostgreSQL 13.5, see Amazon Aurora PostgreSQL updates. The following issues are resolved in Babelfish 1.1 release. For more information about Babelfish, see Working with Babelfish for Aurora PostgreSQL.

Releases

- Babelfish for Aurora PostgreSQL release 1.1.2, December 16, 2022
- Babelfish for Aurora PostgreSQL release 1.1.1, October 18, 2022
- Babelfish for Aurora PostgreSQL release 1.1.0, February 25, 2022

Babelfish for Aurora PostgreSQL release 1.1.2, December 16, 2022

- Fixed an issue that prevented successful minor version upgrade from Babelfish for Aurora PostgreSQL 13.4 DB cluster to Aurora PostgreSQL 13.5.

Babelfish for Aurora PostgreSQL release 1.1.1, October 18, 2022

Security enhancements

- Fixed critical issues in Babelfish due to incorrect handling of user input for some application features. This is tracked in https://github.com/babelfish-for-postgresql/babelfish_extensions/security/advisories/GHSA-m399-rrc8-j6fj.

Babelfish for Aurora PostgreSQL release 1.1.0, February 25, 2022

Babelfish for Aurora PostgreSQL version 1.1.0 adds support for the following Microsoft SQL Server functionality and T-SQL commands. For more information, see Working with Babelfish for Aurora PostgreSQL.

- Unique indexes or UNIQUE constraints on nullable columns. To use this capability, change the `escape_hatch_unique_constraint` to `'ignore'`. For more information, see Managing Babelfish error handling
- Reference transition tables from triggers with multiple DML actions.
- Identifiers that have leading dot characters.
- The COLUMNPROPERTY function (limited to CharMaxLen and AllowsNull properties).
- System-defined @@ variables: @@CURSOR_ROWS, @@LOCK_TIMEOUT, @@MAX_CONNECTIONS, @@MICROSOFTVERSION, @@NESTLEVEL, and @@PROCID.
- Built-in functions: CHOOSE, CONCAT_WS, CURSOR_STATUS, DATEFROMPARTS, DATETIMEFROMPARTS, ORIGINAL_LOGIN, SCHEMA_NAME (now fully supported), SESSION_USER, SQUARE, and TRIGGER_NESTLEVEL supported (but only without arguments).
- System stored procedures: sp_columns, sp_columns_100, sp_columns_managed, sp_cursor, sp_cursor_list, sp_cursorclose, sp_cursorexecute, sp_cursorfetch, sp_cursoropen, sp_cursoroption, sp_cursorprepare, sp_cursorprepexec, sp_cursorunprepare, sp_databases, sp_datatype_info, sp_datatype_info_100, sp_describe_cursor, sp_describe_first_result_set, sp_describe_undeclared_parameters, sp_oledb_ro_usrname, sp_pkeys, sp_prepare, sp_statistics, sp_statistics_100, sp_tablecollations_100, sp_tables, and sp_unprepare.
- For a list of features supported in each Babelfish release, see Supported functionality in Babelfish by version.

Babelfish for Aurora PostgreSQL 1.0 (Deprecated)

This release of Babelfish is provided with Aurora PostgreSQL 13.4. For more information about the improvements in Aurora PostgreSQL 13.5, see Amazon Aurora PostgreSQL updates. The following issues are resolved in Babelfish 1.0 release. For more information about Babelfish, see Working with Babelfish for Aurora PostgreSQL.

Releases

- Babelfish for Aurora PostgreSQL release 1.0.1, October 18, 2022

- Babelfish for Aurora PostgreSQL release 1.0.0, October 28, 2021

Babelfish for Aurora PostgreSQL release 1.0.1, October 18, 2022

Security enhancements

- Fixed critical issues in Babelfish due to incorrect handling of user input for some application features. This is tracked in https://github.com/babelfish-for-postgresql/babelfish_extensions/security/advisories/GHSA-m399-rrc8-j6fj.

Babelfish for Aurora PostgreSQL release 1.0.0, October 28, 2021

- Babelfish for Aurora PostgreSQL version 1.0.0 supports Babelfish 1.0.0 which extends your Amazon Aurora PostgreSQL database with the ability to accept database connections from Microsoft SQL Server clients. For more information, see see Working with Babelfish for Aurora PostgreSQL.

Aurora PostgreSQL query plan management updates

The AWS `apg_plan_mgmt` extension provides your Aurora PostgreSQL DB cluster with the query plan management feature. It allows you to manage the query execution plans generated by the optimizer for your SQL applications for better stability and to prevent regressions. For more information, see Managing query execution plans for Aurora PostgreSQL in the *Amazon Aurora User Guide*.

Topics

- PostgreSQL 18 versions
- PostgreSQL 17 versions
- PostgreSQL 16 versions
- PostgreSQL 15 versions
- PostgreSQL 14 versions
- PostgreSQL 13 versions
- PostgreSQL 12 versions
- Version 2.3 of the Aurora PostgreSQL apg_plan_mgmt extension
- Version 2.1 of the Aurora PostgreSQL apg_plan_mgmt extension
- Version 2.0 of the Aurora PostgreSQL apg_plan_mgmt extension
- Version 1.0.1 of the Aurora PostgreSQL apg_plan_mgmt extension

PostgreSQL 18 versions

Topics

- apg_plan_mgmt version 3.1 for Aurora PostgreSQL 18.4, August 21, 2026
- apg_plan_mgmt version 3.0 for Aurora PostgreSQL 18.3, June 10, 2026

apg_plan_mgmt version 3.1 for Aurora PostgreSQL 18.4, August 21, 2026

Improvements to the `apg_plan_mgmt` extension in version 3.1 for Aurora PostgreSQL 18.4 include the following:

Extension improvements

- Fixed an issue with evolve_plan_baselines in Query Plan Management.

apg_plan_mgmt version 3.0 for Aurora PostgreSQL 18.3, June 10, 2026

Improvements to the `apg_plan_mgmt` extension in version 3.0 for Aurora PostgreSQL 18.3 include the following:

Extension improvements

- Fixed an issue in Query Plan Management that caused plans to not be captured.
- Added an improvement in Query Plan Management to support sql_hash changes with evolve_plan_baselines.

PostgreSQL 17 versions

Topics

- apg_plan_mgmt version 2.10 for Aurora PostgreSQL 17.10, August 21, 2026
- apg_plan_mgmt version 2.9 for Aurora PostgreSQL 17.9, April 6, 2026
- apg_plan_mgmt version 2.9 for Aurora PostgreSQL 17.7, December 18, 2025
- apg_plan_mgmt version 2.9 for Aurora PostgreSQL 17.5, June 30, 2025
- apg_plan_mgmt version 2.8 for Aurora PostgreSQL 17.4, May 01, 2025

apg_plan_mgmt version 2.10 for Aurora PostgreSQL 17.10, August 21, 2026

Improvements to the `apg_plan_mgmt` extension in version 2.10 for Aurora PostgreSQL 17.10 include the following:

Extension improvements

- Fixed an issue with evolve_plan_baselines in Query Plan Management.

apg_plan_mgmt version 2.9 for Aurora PostgreSQL 17.9, April 6, 2026

Improvements to the `apg_plan_mgmt` extension in version 2.9 for Aurora PostgreSQL 17.9 include the following:

Extension improvements

- Fixed an issue in Query Plan Management that caused plans to not be captured.

apg_plan_mgmt version 2.9 for Aurora PostgreSQL 17.7, December 18, 2025

Improvements to the `apg_plan_mgmt` extension in version 2.9 for Aurora PostgreSQL 17.7 include the following:

Extension improvements

- Added an improvement in Query Plan Management to automatically recapture parameter lists that are stored from previous versions.

apg_plan_mgmt version 2.9 for Aurora PostgreSQL 17.5, June 30, 2025

Improvements to the `apg_plan_mgmt` extension in version 2.9 for Aurora PostgreSQL 17.5 include the following:

Additional improvements and enhancements

- Fixed an issue in query plan management with enforcement of Parallel Bitmap Scans when a BitmapOr/BitmapAnd operator is present.
- Fixed an issue in query plan management with enforcement of plans where multiple table partitions are joined to one table partition.
- Fixed an issue in query plan management with enforcement of Append nodes on top of a single table partition.
- The `apg_plan_mgmt` role in query plan management is reserved and can no longer be created, altered or dropped by users.
- Fixed an issue in handling parameter lists from previous versions of query plan management.

apg_plan_mgmt version 2.8 for Aurora PostgreSQL 17.4, May 01, 2025

Improvements to the `apg_plan_mgmt` extension in version 2.8 for Aurora PostgreSQL 17.4 include the following:

New features

- Query plan management can enforce plans having correlated subquery transformation.
- Query plan management can enforce plans having correlated subquery cache.

Additional improvements and enhancements

- Fixed an issue with parameter list that caused an error or restart while querying `dba_plans` view or calling `validate_plans` and `evolve_plan_baselines` functions in Query plan management.
- Fixed an issue with enforcement of plans optimized by correlated any transform in Query plan management.
- Fixed an issue in query plan management with running a utility statement immediately after installing the extension or resetting shared memory.
- Fixed an issue in enforcing, validating and evolving plans for queries with calls to immutable functions in query plan management.
- Fixed an issue in enforcing, validating and evolving plans in query plan management.

PostgreSQL 16 versions

Topics

- apg_plan_mgmt version 2.10 for Aurora PostgreSQL 16.14, August 21, 2026
- apg_plan_mgmt version 2.9 for Aurora PostgreSQL 16.13, April 6, 2026
- apg_plan_mgmt version 2.9 for Aurora PostgreSQL 16.11, December 18, 2025
- apg_plan_mgmt version 2.9 for Aurora PostgreSQL 16.9, June 30, 2025
- apg_plan_mgmt version 2.8 for Aurora PostgreSQL 16.8, April 8, 2025
- apg_plan_mgmt version 2.7 for Aurora PostgreSQL 16.6, December 27, 2024
- apg_plan_mgmt version 2.7 for Aurora PostgreSQL 16.3

- apg_plan_mgmt version 2.6 for Aurora PostgreSQL 16.2
- apg_plan_mgmt version 2.6 for Aurora PostgreSQL 16.1

apg_plan_mgmt version 2.10 for Aurora PostgreSQL 16.14, August 21, 2026

Improvements to the `apg_plan_mgmt` extension in version 2.10 for Aurora PostgreSQL 16.14 include the following:

Extension improvements

- Fixed an issue with evolve_plan_baselines in Query Plan Management.

apg_plan_mgmt version 2.9 for Aurora PostgreSQL 16.13, April 6, 2026

Improvements to the `apg_plan_mgmt` extension in version 2.9 for Aurora PostgreSQL 16.13 include the following:

Extension improvements

- Fixed an issue in Query Plan Management that caused plans to not be captured.

apg_plan_mgmt version 2.9 for Aurora PostgreSQL 16.11, December 18, 2025

Improvements to the `apg_plan_mgmt` extension in version 2.9 for Aurora PostgreSQL 16.11 include the following:

Extension improvements

- Added an improvement in Query Plan Management to automatically recapture parameter lists that are stored from previous versions.

apg_plan_mgmt version 2.9 for Aurora PostgreSQL 16.9, June 30, 2025

Improvements to the `apg_plan_mgmt` extension in version 2.9 for Aurora PostgreSQL 16.9 include the following:

Additional improvements and enhancements

- Fixed an issue in query plan management with enforcement of Parallel Bitmap Scans when a BitmapOr/BitmapAnd operator is present.
- Fixed an issue in query plan management with enforcement of plans where multiple table partitions are joined to one table partition.
- Fixed an issue in query plan management with enforcement of Append nodes on top of a single table partition.
- The `apg_plan_mgmt` role in query plan management is reserved and can no longer be created, altered or dropped by users.
- Fixed an issue in handling parameter lists from previous versions of query plan management.

apg_plan_mgmt version 2.8 for Aurora PostgreSQL 16.8, April 8, 2025

Improvements to the `apg_plan_mgmt` extension in version 2.8 for Aurora PostgreSQL 16.8 include the following:

New features

- Query plan management can enforce plans having correlated subquery transformation.
- Query plan management can enforce plans having correlated subquery cache.

Additional improvements and enhancements

- Fixed an issue with parameter list that caused an error or restart while querying `dba_plans` view or calling `validate_plans` and `evolve_plan_baselines` functions in Query plan management.
- Fixed an issue with enforcement of plans optimized by correlated any transform in Query plan management.
- Fixed an issue in Query plan management with running a utility statement immediately after installing the extension or resetting shared memory.
- Fixed an issue in enforcing, validating and evolving plans for queries with calls to immutable functions in Query plan management.
- Fixed an issue in enforcing, validating and evolving plans in Query plan management.

apg_plan_mgmt version 2.7 for Aurora PostgreSQL 16.6, December 27, 2024

Improvements to the `apg_plan_mgmt` extension in version 2.7 for Aurora PostgreSQL 16.6 include the following:

Additional improvements and enhancements

- Fixed an issue with plan capture on replica in query plan management where the shared memory array in the replica would become full.
- Fixed an issue with query plan management background worker that caused plan retention period to not be enforced and last used date to not be updated.
- Fixed an issue related to query plan management background worker.
- Fixed an issue with enforcement of query plan management plans containing bitmap scans.
- Fixed an issue with query plan management where plans were captured incorrectly for functions or procedure with multiple queries.
- Fixed an issue with capturing plans of nested query executions in query plan management.
- Fixed an issue with capturing plans in query plan management with extended query protocol.

apg_plan_mgmt version 2.7 for Aurora PostgreSQL 16.3

Improvements to the `apg_plan_mgmt` extension in version 2.7 for Aurora PostgreSQL 16.3 include the following:

New features

- You no longer need to update the `plan_hash_version`. After upgrading the database engine, QPM automatically enables new features. You don't need to take any action for new features to become available.

Additional improvements and enhancements

- Fixed an issue with enforcement of QPM plans containing more than 64 partitioned tables.
- Fixed an issue with enforcement of QPM plans containing the Append operator.
- Fixed an issue with QPM validate_plans with update_plan_hash action.

apg_plan_mgmt version 2.6 for Aurora PostgreSQL 16.2

Improvements to the `apg_plan_mgmt` extension in version 2.6 for Aurora PostgreSQL 16.2 include the following:

New features

- QPM can enforce plans having Aggregate operators.

Additional improvements and enhancements

- Fixed an issue where dropping a database did not remove associated captured plans from shared memory.
- Fixed an issue with enforcement of plans containing views.
- Improvements in Parallel Append plan enforcement.
- Fixed an issue related to plan capture.
- Fixed an issue with enforcement of plans containing gather nodes.

apg_plan_mgmt version 2.6 for Aurora PostgreSQL 16.1

Improvements to the `apg_plan_mgmt` extension in version 2.6 for Aurora PostgreSQL 16.1 include the following:

New features

- Plan outlines will be updated to the latest format version as part of the `update_plan_hash` action for `apg_plan_mgmt.validate_plans` function.
- Added support for parallel Append enforcement as a part of Parallel Query Enforcement. To enforce parallel append nodes correctly, you must do the following:
  1. Set `apg_plan_mgmt.plan_hash_version` to 5.
  2. Call `apg_plan_mgmt.validate_plans('update_plan_hash')`.

Additional improvements and enhancements

- Performance improvement in plan hash calculation.
- Enhanced memory utilization for plan outlines that contain repetitive subplans.

- Fixed an issue in parallel query enforcement where `GatherMerge` could not be enforced.
- Fixed an issue where estimated cost of enforced plan was incorrect.
- Fixed an issue in enforcement of approved plans where the outline contains partitioned tables and subplans.

PostgreSQL 15 versions

Topics

- apg_plan_mgmt version 2.10 for Aurora PostgreSQL 15.18, August 21, 2026
- apg_plan_mgmt version 2.9 for Aurora PostgreSQL 15.17, April 6, 2026
- apg_plan_mgmt version 2.9 for Aurora PostgreSQL 15.15, December 18, 2025
- apg_plan_mgmt version 2.9 for Aurora PostgreSQL 15.13, June 30, 2025
- apg_plan_mgmt version 2.8 for Aurora PostgreSQL 15.12, April 8, 2025
- apg_plan_mgmt version 2.7 for Aurora PostgreSQL 15.10, December 27, 2024
- apg_plan_mgmt version 2.7 for Aurora PostgreSQL 15.8, September 30, 2024
- apg_plan_mgmt version 2.7 for Aurora PostgreSQL 15.7, August 8, 2024
- apg_plan_mgmt version 2.6 for Aurora PostgreSQL 15.6
- apg_plan_mgmt version 2.6 for Aurora PostgreSQL 15.5
- apg_plan_mgmt version 2.5 for Aurora PostgreSQL 15.4
- apg_plan_mgmt version 2.4 for Aurora PostgreSQL 15.3

apg_plan_mgmt version 2.10 for Aurora PostgreSQL 15.18, August 21, 2026

Improvements to the `apg_plan_mgmt` extension in version 2.10 for Aurora PostgreSQL 15.18 include the following:

Extension improvements

- Fixed an issue with evolve_plan_baselines in Query Plan Management.

apg_plan_mgmt version 2.9 for Aurora PostgreSQL 15.17, April 6, 2026

Improvements to the `apg_plan_mgmt` extension in version 2.9 for Aurora PostgreSQL 15.17 include the following:

Extension improvements

- Fixed an issue in Query Plan Management that caused plans to not be captured.

apg_plan_mgmt version 2.9 for Aurora PostgreSQL 15.15, December 18, 2025

Improvements to the `apg_plan_mgmt` extension in version 2.9 for Aurora PostgreSQL 15.15 include the following:

Extension improvements

- Added an improvement in Query Plan Management to automatically recapture parameter lists that are stored from previous versions.

apg_plan_mgmt version 2.9 for Aurora PostgreSQL 15.13, June 30, 2025

Improvements to the `apg_plan_mgmt` extension in version 2.9 for Aurora PostgreSQL 15.13 include the following:

Additional improvements and enhancements

- Fixed an issue in query plan management with enforcement of Parallel Bitmap Scans when a BitmapOr/BitmapAnd operator is present.
- Fixed an issue in query plan management with enforcement of plans where multiple table partitions are joined to one table partition.
- Fixed an issue in query plan management with enforcement of Append nodes on top of a single table partition.
- The `apg_plan_mgmt` role in query plan management is reserved and can no longer be created, altered or dropped by users.

- Fixed an issue in handling parameter lists from previous versions of query plan management.

apg_plan_mgmt version 2.8 for Aurora PostgreSQL 15.12, April 8, 2025

Improvements to the `apg_plan_mgmt` extension in version 2.8 for Aurora PostgreSQL 15.12 include the following:

Additional improvements and enhancements

- Fixed an issue with parameter list that caused an error or restart while querying `dba_plans` view or calling `validate_plans` and `evolve_plan_baselines` functions in Query plan management.
- Fixed an issue with enforcement of plans optimized by correlated any transform in Query plan management.
- Fixed an issue in Query plan management with running a utility statement immediately after installing the extension or resetting shared memory.
- Fixed an issue in enforcing, validating and evolving plans for queries with calls to immutable functions in Query plan management.
- Fixed an issue in enforcing, validating and evolving plans in Query plan management.

apg_plan_mgmt version 2.7 for Aurora PostgreSQL 15.10, December 27, 2024

Improvements to the `apg_plan_mgmt` extension in version 2.7 for Aurora PostgreSQL 15.10 include the following:

Additional improvements and enhancements

- Fixed an issue with plan capture on replica in query plan management where the shared memory array in the replica would become full.
- Fixed an issue with query plan management background worker that caused plan retention period to not be enforced and last used date to not be updated.
- Fixed an issue related to query plan management background worker.
- Fixed an issue with enforcement of query plan management plans containing bitmap scans.
- Fixed an issue with query plan management where plans were captured incorrectly for functions or procedure with multiple queries.

- Fixed an issue with capturing plans of nested query executions in query plan management.
- Fixed an issue with capturing plans in query plan management with extended query protocol.

apg_plan_mgmt version 2.7 for Aurora PostgreSQL 15.8, September 30, 2024

Improvements to the `apg_plan_mgmt` extension in version 2.7 for Aurora PostgreSQL 15.8 include the following:

Additional improvements and enhancements

- Fixed an issue with enforcement of Query Plan Management plans containing Hash Aggregates.

apg_plan_mgmt version 2.7 for Aurora PostgreSQL 15.7, August 8, 2024

Improvements to the `apg_plan_mgmt` extension in version 2.7 for Aurora PostgreSQL 15.7 include the following:

New features

- You no longer need to update the `plan_hash_version`. After upgrading the database engine, QPM automatically enables new features. You don't need to take any action for new features to become available.

Additional improvements and enhancements

- Fixed an issue with enforcement of QPM plans containing more than 64 partitioned tables.
- Fixed an issue with enforcement of QPM plans containing the Append operator.
- Fixed an issue with QPM validate_plans with update_plan_hash action.

apg_plan_mgmt version 2.6 for Aurora PostgreSQL 15.6

Improvements to the `apg_plan_mgmt` extension in version 2.6 for Aurora PostgreSQL 15.6 include the following:

New features

- QPM can enforce plans having Aggregate operators.

Additional improvements and enhancements

- Fixed an issue where dropping a database did not remove associated captured plans from shared memory.
- Fixed an issue with enforcement of plans containing views.
- Improvements in Parallel Append plan enforcement.
- Fixed an issue related to plan capture.
- Fixed an issue with enforcement of plans containing gather nodes.

apg_plan_mgmt version 2.6 for Aurora PostgreSQL 15.5

Improvements to the `apg_plan_mgmt` extension in version 2.6 for Aurora PostgreSQL 15.5 include the following:

New features

- Plan outlines will be updated to the latest format version as part of the `update_plan_hash` action for `apg_plan_mgmt.validate_plans` function.
- Added support for parallel Append enforcement as a part of Parallel Query Enforcement. To enforce parallel append nodes correctly, you must do the following:
  1. Set `apg_plan_mgmt.plan_hash_version` to 5.
  2. Call `apg_plan_mgmt.validate_plans('update_plan_hash')`.

Additional improvements and enhancements

- Performance improvement in plan hash calculation.
- Enhanced memory utilization for plan outlines that contain repetitive subplans.
- Fixed an issue in parallel query enforcement where `GatherMerge` could not be enforced.
- Fixed an issue where estimated cost of enforced plan was incorrect.
- Fixed an issue in enforcement of approved plans where the outline contains partitioned tables and subplans.

apg_plan_mgmt version 2.5 for Aurora PostgreSQL 15.4

Improvements to the `apg_plan_mgmt` extension in version 2.5 for Aurora PostgreSQL 15.4 include the following:

New features

- QPM can enforce query plans to have parallel operators except Parallel Append node. To enforce parallel query plans correctly, you must do the following after upgrading to 15.4 or 14.9:
  - Set `apg_plan_mgmt.plan_hash_version` to 4 or above.
  - Call `apg_plan_mgmt.validate_plans('update_plan_hash')`.
  - Re-capture approved plans that has Gather node in plan_outline.
- QPM can enforce query plans with Materialize nodes. To enforce Materialize nodes, you must do the following after upgrading to 15.4 or 14.9:
  - Set `apg_plan_mgmt.plan_hash_version` to 4 or above.
  - Call `apg_plan_mgmt.validate_plans('update_plan_hash')`.
- To capture query plans from Replicas, you must update `apg_plan_mgmt` extension by calling ALTER EXTENSION apg_plan_mgmt UPDATE.
- You need to specify `apg_plan_mgmt.plan_capture_threshold` in order to not allow QPM to capture any query plans.

Additional improvements and enhancements

- Performance improvement on `plan_hash` calculation.

apg_plan_mgmt version 2.4 for Aurora PostgreSQL 15.3

Improvements to the `apg_plan_mgmt` extension in version 2.4 for Aurora PostgreSQL 15.3 include the following:

New features

- Introduced a new GUC auto_explain.hashes. When it is set to true (default: false), sql_hash and plan_hash are shown at the end of auto explain result.
- Introduced a new GUC apg_plan_mgmt.explain_hashes. When it is set to true (default: false), EXPLAIN result shows sql_hash and plan_hash even without hashes true option.

- Introduced a new GUC apg_plan_mgmt.log_plan_enforcement_result. Depending on its value (default: none), plan enforcement results are written to Postgres log files.
- Introduced a new plan hash calculation version to support partitioned tables. Users need to set apg_plan_mgmt.plan_hash_version to 3 and call apg_plan_mgmt.validate_plans('update_plan_hash') in each database with `apg_plan_mgmt` installed and entries in the plans table.
- QPM can enforce query plans with Memoize nodes.
- The `apg_plan_mgmt.copy_outline` function can take a new 5th argument, `force_update_target_plan_hash`. If it is set to true, the target plan hash will be updated even though the source plan isn't reproducible for the target sql_hash.

Additional improvements and enhancements

- Fixed an issue with JDBC prepared statements plan enforcement.
- Improved parity regarding queryid between pg_stat_statements and apg_plan_mgmt.dba_plans.
- Fixed a plan enforcement issue when index names end with digits.
- The apg_plan_mgmt.copy_outline function now copies environment_variables.
- The minimum value of apg_plan_mgmt.plan_retention_period changes to 1 from 32.
- The query plan management can now save plans for queries in read-only transactions from the writer nodes.
- Fixed an issue in the apg_plan_mgmt.evolve_plan_baselines function.
- Fixed an issue that could cause unavailability when the apg_plan_mgmt is enabled.

To learn how to install, upgrade, and use the `apg_plan_mgmt` extension, see Managing query execution plans for Aurora PostgreSQL in the *Amazon Aurora User Guide*.

PostgreSQL 14 versions

Topics

- apg_plan_mgmt version 2.10 for Aurora PostgreSQL 14.23, August 21, 2026
- apg_plan_mgmt version 2.9 for Aurora PostgreSQL 14.22, April 6, 2026
- apg_plan_mgmt version 2.9 for Aurora PostgreSQL 14.20, December 18, 2025
- apg_plan_mgmt version 2.9 for Aurora PostgreSQL 14.18, June 30, 2025

- apg_plan_mgmt version 2.8 for Aurora PostgreSQL 14.17, April 8, 2025
- apg_plan_mgmt version 2.7 for Aurora PostgreSQL 14.15, December 27, 2024
- apg_plan_mgmt version 2.7 for Aurora PostgreSQL 14.12, August 8, 2024
- apg_plan_mgmt version 2.6 for Aurora PostgreSQL 14.11
- apg_plan_mgmt version 2.6 for Aurora PostgreSQL 14.10
- apg_plan_mgmt version 2.5 for Aurora PostgreSQL 14.9
- apg_plan_mgmt version 2.4 for Aurora PostgreSQL 14.8

apg_plan_mgmt version 2.10 for Aurora PostgreSQL 14.23, August 21, 2026

Improvements to the `apg_plan_mgmt` extension in version 2.10 for Aurora PostgreSQL 14.23 include the following:

Extension improvements

- Fixed an issue with evolve_plan_baselines in Query Plan Management.

apg_plan_mgmt version 2.9 for Aurora PostgreSQL 14.22, April 6, 2026

Improvements to the `apg_plan_mgmt` extension in version 2.9 for Aurora PostgreSQL 14.22 include the following:

Extension improvements

- Fixed an issue in Query Plan Management that caused plans to not be captured.

apg_plan_mgmt version 2.9 for Aurora PostgreSQL 14.20, December 18, 2025

Improvements to the `apg_plan_mgmt` extension in version 2.9 for Aurora PostgreSQL 14.20 include the following:

Extension improvements

- Added an improvement in Query Plan Management to automatically recapture parameter lists that are stored from previous versions.

apg_plan_mgmt version 2.9 for Aurora PostgreSQL 14.18, June 30, 2025

Improvements to the `apg_plan_mgmt` extension in version 2.9 for Aurora PostgreSQL 14.18 include the following:

Additional improvements and enhancements

- Fixed an issue in query plan management with enforcement of Parallel Bitmap Scans when a BitmapOr/BitmapAnd operator is present.
- Fixed an issue in query plan management with enforcement of plans where multiple table partitions are joined to one table partition.
- Fixed an issue in query plan management with enforcement of Append nodes on top of a single table partition.
- The `apg_plan_mgmt` role in query plan management is reserved and can no longer be created, altered or dropped by users.
- Fixed an issue in handling parameter lists from previous versions of query plan management.

apg_plan_mgmt version 2.8 for Aurora PostgreSQL 14.17, April 8, 2025

Improvements to the `apg_plan_mgmt` extension in version 2.8 for Aurora PostgreSQL 14.17 include the following:

Additional improvements and enhancements

- Fixed an issue with parameter list that caused an error or restart while querying `dba_plans` view or calling `validate_plans` and `evolve_plan_baselines` functions in Query plan management.
- Fixed an issue with enforcement of plans optimized by correlated any transform in Query plan management.

- Fixed an issue in Query plan management with running a utility statement immediately after installing the extension or resetting shared memory.
- Fixed an issue in enforcing, validating and evolving plans for queries with calls to immutable functions in Query plan management.
- Fixed an issue in enforcing, validating and evolving plans in Query plan management.

apg_plan_mgmt version 2.7 for Aurora PostgreSQL 14.15, December 27, 2024

Improvements to the `apg_plan_mgmt` extension in version 2.7 for Aurora PostgreSQL 14.15 include the following:

Additional improvements and enhancements

- Fixed an issue with plan capture on replica in query plan management where the shared memory array in the replica would become full.
- Fixed an issue with query plan management background worker that caused plan retention period to not be enforced and last used date to not be updated.
- Fixed an issue related to query plan management background worker.
- Fixed an issue with enforcement of query plan management plans containing bitmap scans.
- Fixed an issue with query plan management where plans were captured incorrectly for functions or procedure with multiple queries.
- Fixed an issue with capturing plans of nested query executions in query plan management.
- Fixed an issue with capturing plans in query plan management with extended query protocol.

apg_plan_mgmt version 2.7 for Aurora PostgreSQL 14.12, August 8, 2024

Improvements to the `apg_plan_mgmt` extension in version 2.7 for Aurora PostgreSQL 14.12 include the following:

New features

- You no longer need to update the `plan_hash_version`. After upgrading the database engine, QPM automatically enables new features. You don't need to take any action for new features to become available.

Additional improvements and enhancements

- Fixed an issue with enforcement of QPM plans containing more than 64 partitioned tables.
- Fixed an issue with enforcement of QPM plans containing the Append operator.
- Fixed an issue with QPM validate_plans with update_plan_hash action.

apg_plan_mgmt version 2.6 for Aurora PostgreSQL 14.11

Improvements to the `apg_plan_mgmt` extension in version 2.6 for Aurora PostgreSQL 14.11 include the following:

New features

- QPM can enforce plans having Aggregate operators.

Additional improvements and enhancements

- Fixed an issue where dropping a database did not remove associated captured plans from shared memory.
- Fixed an issue with enforcement of plans containing views.
- Improvements in Parallel Append plan enforcement.
- Fixed an issue related to plan capture.
- Fixed an issue with enforcement of plans containing gather nodes.

apg_plan_mgmt version 2.6 for Aurora PostgreSQL 14.10

Improvements to the `apg_plan_mgmt` extension in version 2.6 for Aurora PostgreSQL 14.10 include the following:

New features

- Plan outlines will be updated to the latest format version as part of the `update_plan_hash` action for `apg_plan_mgmt.validate_plans` function.
- Added support for parallel Append enforcement as a part of Parallel Query Enforcement. To enforce parallel append nodes correctly, you must do the following:
  1. Set `apg_plan_mgmt.plan_hash_version` to 5.
  2. Call `apg_plan_mgmt.validate_plans('update_plan_hash')`.

Additional improvements and enhancements

- Performance improvement in plan hash calculation.
- Enhanced memory utilization for plan outlines that contain repetitive subplans.
- Fixed an issue in parallel query enforcement where `GatherMerge` could not be enforced.
- Fixed an issue where estimated cost of enforced plan was incorrect.
- Fixed an issue in enforcement of approved plans where the outline contains partitioned tables and subplans.

apg_plan_mgmt version 2.5 for Aurora PostgreSQL 14.9

Improvements to the `apg_plan_mgmt` extension in version 2.5 for Aurora PostgreSQL 14.9 include the following:

New features

- QPM can enforce query plans to have parallel operators except Parallel Append node. To enforce parallel query plans correctly, you must do the following after upgrading to 15.4 or 14.9:
  - Set `apg_plan_mgmt.plan_hash_version` to 4 or above.
  - Call `apg_plan_mgmt.validate_plans('update_plan_hash')`.
  - Re-capture approved plans that has Gather node in plan_outline.
- QPM can enforce query plans with Materialize nodes. To enforce Materialize nodes, you must do the following after upgrading to 15.4 or 14.9:
  - Set `apg_plan_mgmt.plan_hash_version` to 4 or above.
  - Call `apg_plan_mgmt.validate_plans('update_plan_hash')`.

- To capture query plans from Replicas, you must update `apg_plan_mgmt` extension by calling ALTER EXTENSION apg_plan_mgmt UPDATE.
- You need to specify `apg_plan_mgmt.plan_capture_threshold` in order to not allow QPM to capture any query plans.

Additional improvements and enhancements

- Performance improvement on `plan_hash` calculation.

apg_plan_mgmt version 2.4 for Aurora PostgreSQL 14.8

Improvements to the `apg_plan_mgmt` extension in version 2.4 for Aurora PostgreSQL 14.8 include the following:

New features

- Introduced a new GUC auto_explain.hashes. When it is set to true (default: false), sql_hash and plan_hash are shown at the end of auto explain result.
- Introduced a new GUC apg_plan_mgmt.explain_hashes. When it is set to true (default: false), EXPLAIN result shows sql_hash and plan_hash even without hashes true option.
- Introduced a new GUC apg_plan_mgmt.log_plan_enforcement_result. Depending on its value (default: none), plan enforcement results are written to Postgres log files.
- Introduced a new plan hash calculation version to support partitioned tables. Users need to set apg_plan_mgmt.plan_hash_version to 3 and call apg_plan_mgmt.validate_plans('update_plan_hash') in each database with `apg_plan_mgmt` installed and entries in the plans table.
- QPM can enforce query plans with Memoize nodes.
- The `apg_plan_mgmt.copy_outline` function can take a new 5th argument, `force_update_target_plan_hash`. If it is set to true, the target plan hash will be updated even though the source plan isn't reproducible for the target sql_hash.

Additional improvements and enhancements

- Fixed an issue with JDBC prepared statements plan enforcement.
- Improved parity regarding queryid between pg_stat_statements and apg_plan_mgmt.dba_plans.

- Fixed a plan enforcement issue when index names end with digits.
- The apg_plan_mgmt.copy_outline function now copies environment_variables.
- The minimum value of apg_plan_mgmt.plan_retention_period changes to 1 from 32.
- The query plan management can now save plans for queries in read-only transactions from the writer nodes.
- Fixed an issue in the apg_plan_mgmt.evolve_plan_baselines function.
- Fixed an issue that could cause unavailability when the apg_plan_mgmt is enabled.

To learn how to install, upgrade, and use the `apg_plan_mgmt` extension, see Managing query execution plans for Aurora PostgreSQL in the *Amazon Aurora User Guide*.

PostgreSQL 13 versions

Topics

- apg_plan_mgmt version 2.9 for Aurora PostgreSQL 13.23, December 18, 2025
- apg_plan_mgmt version 2.9 for Aurora PostgreSQL 13.21, June 30, 2025
- apg_plan_mgmt version 2.8 for Aurora PostgreSQL 13.20, April 8, 2025
- apg_plan_mgmt version 2.7 for Aurora PostgreSQL 13.18, December 27, 2024
- apg_plan_mgmt version 2.7 for Aurora PostgreSQL 13.15, August 8, 2024
- apg_plan_mgmt version 2.6 for Aurora PostgreSQL 13.14
- apg_plan_mgmt version 2.6 for Aurora PostgreSQL 13.13
- apg_plan_mgmt version 2.5 for Aurora PostgreSQL 13.12
- apg_plan_mgmt version 2.4 for Aurora PostgreSQL 13.11

apg_plan_mgmt version 2.9 for Aurora PostgreSQL 13.23, December 18, 2025

Improvements to the `apg_plan_mgmt` extension in version 2.9 for Aurora PostgreSQL 13.23 include the following:

Extension improvements

- Added an improvement in Query Plan Management to automatically recapture parameter lists that are stored from previous versions.

apg_plan_mgmt version 2.9 for Aurora PostgreSQL 13.21, June 30, 2025

Improvements to the `apg_plan_mgmt` extension in version 2.9 for Aurora PostgreSQL 13.21 include the following:

Additional improvements and enhancements

- Fixed an issue in query plan management with enforcement of Parallel Bitmap Scans when a BitmapOr/BitmapAnd operator is present.
- Fixed an issue in query plan management with enforcement of plans where multiple table partitions are joined to one table partition.
- Fixed an issue in query plan management with enforcement of Append nodes on top of a single table partition.
- The `apg_plan_mgmt` role in Query Plan Management is reserved and can no longer be created, altered or dropped by users.
- Fixed an issue in handling parameter lists from previous versions of Query Plan Management.

apg_plan_mgmt version 2.8 for Aurora PostgreSQL 13.20, April 8, 2025

Improvements to the `apg_plan_mgmt` extension in version 2.8 for Aurora PostgreSQL 13.20 include the following:

Additional improvements and enhancements

- Fixed an issue with parameter list that caused an error or restart while querying `dba_plans` view or calling `validate_plans` and `evolve_plan_baselines` functions in Query plan management.
- Fixed an issue with enforcement of plans optimized by correlated any transform in Query plan management.
- Fixed an issue in Query plan management with running a utility statement immediately after installing the extension or resetting shared memory.
- Fixed an issue in enforcing, validating and evolving plans for queries with calls to immutable functions in Query plan management.
- Fixed an issue in enforcing, validating and evolving plans in Query plan management.

apg_plan_mgmt version 2.7 for Aurora PostgreSQL 13.18, December 27, 2024

Improvements to the `apg_plan_mgmt` extension in version 2.7 for Aurora PostgreSQL 13.18 include the following:

Additional improvements and enhancements

- Fixed an issue with plan capture on replica in query plan management where the shared memory array in the replica would become full.
- Fixed an issue with query plan management background worker that caused plan retention period to not be enforced and last used date to not be updated.
- Fixed an issue related to query plan management background worker.
- Fixed an issue with enforcement of query plan management plans containing bitmap scans.
- Fixed an issue with query plan management where plans were captured incorrectly for functions or procedure with multiple queries.
- Fixed an issue with capturing plans of nested query executions in query plan management.
- Fixed an issue with capturing plans in query plan management with extended query protocol.

apg_plan_mgmt version 2.7 for Aurora PostgreSQL 13.15, August 8, 2024

Improvements to the `apg_plan_mgmt` extension in version 2.7 for Aurora PostgreSQL 13.15 include the following:

New features

- You no longer need to update the `plan_hash_version`. After upgrading the database engine, QPM automatically enables new features. You don't need to take any action for new features to become available.

Additional improvements and enhancements

- Fixed an issue with enforcement of QPM plans containing more than 64 partitioned tables.
- Fixed an issue with enforcement of QPM plans containing the Append operator.
- Fixed an issue with QPM validate_plans with update_plan_hash action.

apg_plan_mgmt version 2.6 for Aurora PostgreSQL 13.14

Improvements to the `apg_plan_mgmt` extension in version 2.6 for Aurora PostgreSQL 13.14 include the following:

New features

- QPM can enforce plans having Aggregate operators.

Additional improvements and enhancements

- Fixed an issue where dropping a database did not remove associated captured plans from shared memory.
- Fixed an issue with enforcement of plans containing views.
- Improvements in Parallel Append plan enforcement.
- Fixed an issue related to plan capture.
- Fixed an issue with enforcement of plans containing gather nodes.

apg_plan_mgmt version 2.6 for Aurora PostgreSQL 13.13

Improvements to the `apg_plan_mgmt` extension in version 2.6 for Aurora PostgreSQL 13.13 include the following:

New features

- Plan outlines will be updated to the latest format version as part of the `update_plan_hash` action for `apg_plan_mgmt.validate_plans` function.
- Added support for parallel Append enforcement as a part of Parallel Query Enforcement. To enforce parallel append nodes correctly, you must do the following:
  1. Set `apg_plan_mgmt.plan_hash_version` to 5.
  2. Call `apg_plan_mgmt.validate_plans('update_plan_hash')`.

Additional improvements and enhancements

- Performance improvement in plan hash calculation.
- Enhanced memory utilization for plan outlines that contain repetitive subplans.

- Fixed an issue in parallel query enforcement where `GatherMerge` could not be enforced.
- Fixed an issue where estimated cost of enforced plan was incorrect.
- Fixed an issue in enforcement of approved plans where the outline contains partitioned tables and subplans.

apg_plan_mgmt version 2.5 for Aurora PostgreSQL 13.12

Improvements to the `apg_plan_mgmt` extension in version 2.5 for Aurora PostgreSQL 13.12 include the following:

New features

- QPM can enforce query plans to have parallel operators except Parallel Append node. To enforce parallel query plans correctly, you must do the following after upgrading to 15.4 or 14.9:
  - Set `apg_plan_mgmt.plan_hash_version` to 4 or above.
  - Call `apg_plan_mgmt.validate_plans('update_plan_hash')`.
  - Re-capture approved plans that has Gather node in plan_outline.
- To capture query plans from Replicas, you must update `apg_plan_mgmt` extension by calling ALTER EXTENSION apg_plan_mgmt UPDATE.
- You need to specify `apg_plan_mgmt.plan_capture_threshold` in order to not allow QPM to capture any query plans.

apg_plan_mgmt version 2.4 for Aurora PostgreSQL 13.11

Improvements to the `apg_plan_mgmt` extension in version 2.4 for Aurora PostgreSQL 13.11 include the following:

New features

- Introduced a new GUC auto_explain.hashes. When it is set to true (default: false), sql_hash and plan_hash are shown at the end of auto explain result.
- Introduced a new GUC apg_plan_mgmt.explain_hashes. When it is set to true (default: false), EXPLAIN result shows sql_hash and plan_hash even without hashes true option.
- Introduced a new GUC apg_plan_mgmt.log_plan_enforcement_result. Depending on its value (default: none), plan enforcement results are written to Postgres log files.

- Introduced a new plan hash calculation version to support partitioned tables. Users need to set apg_plan_mgmt.plan_hash_version to 3 and call apg_plan_mgmt.validate_plans('update_plan_hash') in each database with `apg_plan_mgmt` installed and entries in the plans table.
- The `apg_plan_mgmt.copy_outline` function can take a new 5th argument, `force_update_target_plan_hash`. If it is set to true, the target plan hash will be updated even though the source plan isn't reproducible for the target sql_hash.

Additional improvements and enhancements

- Fixed an issue with JDBC prepared statements plan enforcement.
- Fixed a plan enforcement issue when index names end with digits.
- The apg_plan_mgmt.copy_outline function now copies environment_variables.
- The minimum value of apg_plan_mgmt.plan_retention_period changes to 1 from 32.
- The query plan management can now save plans for queries in read-only transactions from the writer nodes.
- Fixed an issue in the apg_plan_mgmt.evolve_plan_baselines function.
- Fixed an issue that could cause unavailability when the apg_plan_mgmt is enabled.

To learn how to install, upgrade, and use the `apg_plan_mgmt` extension, see Managing query execution plans for Aurora PostgreSQL in the *Amazon Aurora User Guide*.

PostgreSQL 12 versions

Topics

- apg_plan_mgmt version 2.7 for Aurora PostgreSQL 12.22, December 27, 2024
- apg_plan_mgmt version 2.7 for Aurora PostgreSQL 12.19, August 8, 2024
- apg_plan_mgmt version 2.6 for Aurora PostgreSQL 12.18
- apg_plan_mgmt version 2.6 for Aurora PostgreSQL 12.17
- apg_plan_mgmt version 2.5 for Aurora PostgreSQL 12.16

apg_plan_mgmt version 2.7 for Aurora PostgreSQL 12.22, December 27, 2024

Improvements to the `apg_plan_mgmt` extension in version 2.7 for Aurora PostgreSQL 12.22 include the following:

Additional improvements and enhancements

- Fixed an issue with plan capture on replica in query plan management where the shared memory array in the replica would become full.
- Fixed an issue with query plan management background worker that caused plan retention period to not be enforced and last used date to not be updated.
- Fixed an issue related to query plan management background worker.

apg_plan_mgmt version 2.7 for Aurora PostgreSQL 12.19, August 8, 2024

Improvements to the `apg_plan_mgmt` extension in version 2.7 for Aurora PostgreSQL 12.19 include the following:

New features

- You no longer need to update the `plan_hash_version`. After upgrading the database engine, QPM automatically enables new features. You don't need to take any action for new features to become available.

Additional improvements and enhancements

- Fixed an issue with enforcement of QPM plans containing more than 64 partitioned tables.
- Fixed an issue with enforcement of QPM plans containing the Append operator.
- Fixed an issue with QPM validate_plans with update_plan_hash action.

apg_plan_mgmt version 2.6 for Aurora PostgreSQL 12.18

Improvements to the `apg_plan_mgmt` extension in version 2.6 for Aurora PostgreSQL 12.18 include the following:

Additional improvements and enhancements

- Fixed an issue related to plan capture.

apg_plan_mgmt version 2.6 for Aurora PostgreSQL 12.17

Improvements to the `apg_plan_mgmt` extension in version 2.6 for Aurora PostgreSQL 12.17 include the following:

New features

- Plan outlines will be updated to the latest format version as part of the `update_plan_hash` action for `apg_plan_mgmt.validate_plans` function.

apg_plan_mgmt version 2.5 for Aurora PostgreSQL 12.16

Improvements to the `apg_plan_mgmt` extension in version 2.5 for Aurora PostgreSQL 12.16 include the following:

New features

- To capture query plans from Replicas, you must update `apg_plan_mgmt` extension by calling ALTER EXTENSION apg_plan_mgmt UPDATE.
- You need to specify `apg_plan_mgmt.plan_capture_threshold` in order to not allow QPM to capture any query plans.

Version 2.3 of the Aurora PostgreSQL apg_plan_mgmt extension

Improvements to the `apg_plan_mgmt` extension in version 2.3 includes the following:

New extension features

- Support for a new function, the `apg_plan_mgmt.copy_outline` function. This function allows you to copy a plan hash and a plan outline from one SQL hash and plan hash to another. Use this function when you want to copy a plan that uses hints to other similar statements without using the in-line hint statement at every occurrence. If the update to the query results in an invalid

plan, the function raises an error and rolls back the update. For more information, see Function reference for Aurora PostgreSQL query plan management in the *Amazon Aurora User Guide*.

Extension improvements

- The query plan management feature now saves plans for queries that are inside procedures and DO-blocks. For versions of `apg_plan_mgmt` older than version 2.3, this has been a limitation.

To learn how to install, upgrade, and use the `apg_plan_mgmt` extension, see Managing query execution plans for Aurora PostgreSQL in the *Amazon Aurora User Guide*.

Version 2.1 of the Aurora PostgreSQL apg_plan_mgmt extension

Improvements to the `apg_plan_mgmt` extension in version 2.1 for Aurora PostgreSQL 11.20 includes the following:

New extension features in Aurora PostgreSQL 11.20

- Introduced a new GUC apg_plan_mgmt.log_plan_enforcement_result. Depending on its value (default: none), plan enforcement results are written to Postgres log files.

Extension improvements in Aurora PostgreSQL 11.20

- Fixed an issue with JDBC prepared statements plan enforcement.

To learn how to install, upgrade, and use the `apg_plan_mgmt` extension, see Managing query execution plans for Aurora PostgreSQL in the *Amazon Aurora User Guide*.

Version 2.0 of the Aurora PostgreSQL apg_plan_mgmt extension

The `apg_plan_mgmt` extension changes for version 2.0 include the following:

New extension features

1. You can now manage all queries inside SQL functions, whether they have parameters or not.

2. You can now manage all queries inside PL/pgSQL functions, whether they have parameters or not.
3. You can now manage queries in generic plans, whether they have parameters or not. To learn more about generic plans versus custom plans, see the PREPARE statement in the PostgreSQL documentation.
4. You can now use query plan management to enforce the use of specific types of aggregate methods in query plans.

Extension improvements

1. You can now save plans with a size up to 8KB times the setting of the `max_worker_processes` parameter. Previously the maximum plan size was 8KB.
2. Fixed bugs for unnamed prepared statements such as those from JDBC.
3. Previously, when you tried to do `CREATE EXTENSION apg_plan_mgmt` when it is not loaded in the `shared_preload_libraries`, the PostgreSQL backend connection was dropped. Now, an error message prints and the connection is not dropped.
4. The default value of the `cardinality_error` in the `apg_plan_mgmt.plans table` is NULL, but it can be set to -1 during the `apg_plan_mgmt.evolve_plan_baselines` function. NULL is now used consistently.
5. Plans are now saved for queries that refer to temporary tables.
6. The default maximum number of plans is increased from 1000 to 10000.
7. The following pgss parameters are deprecated because the automatic plan capture mode should be used instead of those parameters.
   - `apg_plan_mgmt.pgss_min_calls`
   - `apg_plan_mgmt.pgss_min_mean_time_ms`
   - `apg_plan_mgmt.pgss_min_stddev_time_ms`
   - `apg_plan_mgmt.pgss_min_total_time_ms`

Version 1.0.1 of the Aurora PostgreSQL apg_plan_mgmt extension

The `apg_plan_mgmt` extension changes for version 1.0.1 include the following:

New extension features

1. The `validate_plans` function has a new `action` value called `update_plan_hash`. This action updates the `plan_hash` ID for plans that can't be reproduced exactly. The `update_plan_hash` value also allows you to fix a plan by rewriting the SQL. You can then register the good plan as an `Approved` plan for the original SQL. Following is an example of using the `update_plan_hash` action.

   ```
   UPDATE apg_plan_mgmt.plans SET plan_hash = new _plan_hash, plan_outline
    = good_plan_outline
      WHERE sql_hash = bad_plan_sql_hash AND plan_hash = bad_plan_plan_hash;
   SELECT apg_plan_mgmt.validate_plans(bad_plan_sql_hash, bad_plan_plan_hash,
    'update_plan_hash');
   SELECT apg_plan_mgmt.reload();
   ```

2. A new `get_explain_stmt` function is available that generates the text of an `EXPLAIN` statement for the specified SQL statement. It includes the parameters `sql_hash`, `plan_hash` and `explain_options`.

   The parameter `explain_options` can be any comma-separated list of valid `EXPLAIN` options, as shown following.

   ```
   analyze,verbose,buffers,hashes,format json
   ```

   If the parameter `explain_options` is NULL or an empty string, the `get_explain_stmt` function generates a simple `EXPLAIN` statement.

   To create an `EXPLAIN` script for your workload or a portion of it, use the `\a` , `\t`, and `\o` options to redirect the output to a file. For example, you can create an `EXPLAIN` script for the top-ranked (top-K) statements by using the PostgreSQL `pg_stat_statements` view sorted by `total_time` in `DESC` order.

3. The precise location of the Gather parallel query operator is determined by costing, and may change slightly over time. To prevent these differences from invalidating the entire plan, query plan management now computes the same `plan_hash` even if the Gather operators move to different places in the plan tree.

4. Support is added for nonparameterized statements inside pl/pgsql functions.

5. Overhead is reduced when the `apg_plan_mgmt` extension is installed on multiple databases in the same cluster while two or more databases are being accessed concurrently. Also, this release fixed a bug in this area that caused plans to not be stored in shared memory.

Extension improvements

1. Improvements to the `evolve_plan_baselines` function.
   a. The `evolve_plan_baselines` function now computes a `cardinality_error` metric over all nodes in the plan. Using this metric, you can identify any plan where the cardinality estimation error is large, and the plan quality is more doubtful. Long-running statements with high `cardinality_error` values are high-priority candidates for query tuning.
   b. Reports generated by `evolve_plan_baselines` now include `sql_hash`, `plan_hash`, and the plan `status`.
   c. You can now allow `evolve_plan_baselines` to approve previously `Rejected` plans.
   d. The meaning of `speedup_factor` for `evolve_plan_baselines` is now always relative to the baseline plan. For example, a value of 1.1 now means 10 percent faster than the baseline plan. A value of 0.9 means 10 percent slower than the baseline plan. The comparison is made using running time alone instead of total time.
   e. The `evolve_plan_baselines` function now warms the cache in a new way. It does this by running the baseline plan, then running the baseline plan one more time, and then running the candidate plan once. Previously, `evolve_plan_baselines` ran the candidate plan twice. This approach added significantly to running time, especially for slow candidate plans. However, running the candidate plan twice is more reliable when the candidate plan uses an index that isn't used in the baseline plan.
2. Query plan management no longer saves plans that refer to system tables or views, temporary tables, or the query plan management's own tables.
3. Bug fixes include caching a plan immediately when saved and fixing a bug that caused the back end to terminate.

Extensions supported for Amazon Aurora PostgreSQL

Aurora PostgreSQL support multiple extensions that enhance your database functionality. Each major engine version has a minimum supported extension version. When we release the first minor version of a new major engine, we publish the minimum supported extension version for that major engine version. We recommend that you upgrade to the latest version of each extension when you upgrade your DB cluster. Extension versions don't automatically upgrade during engine version upgrade workflows.

AWS plans to offer the latest version of extensions in the next quarterly release after they become available. Each extension's versioning scheme, features, and compatibility are determined by the extension developers, not AWS.

AWS might need to end support for extensions. When feasible, we provide 12 months notice before ending support for an extension. However, in cases involving security or other critical issues, we might need to end support for an extension or a specific version of an extension with less than 12 months notice or no notice across all supported engine versions. We might require you to upgrade to a newer version of an extension at any time and will provide instructions in such cases.

Following, you can find version information for each extension supported by currently available Amazon Aurora PostgreSQL releases.

Topics

- Extensions supported for Aurora PostgreSQL 18
- Extensions supported for Aurora PostgreSQL 17
- Extensions supported for Aurora PostgreSQL 16
- Extensions supported for Aurora PostgreSQL 15
- Extensions supported for Aurora PostgreSQL 14
- Extensions supported for Aurora PostgreSQL 13
- Extensions supported for Aurora PostgreSQL 12
- Extensions supported for Aurora PostgreSQL 11
- Extensions supported for Aurora PostgreSQL 10
- Extensions supported for Aurora PostgreSQL 9.6

To upgrade an extension in your Aurora PostgreSQL DB cluster, see Upgrading PostgreSQL extensions in the *Amazon Aurora User Guide*.

For information about installing extensions, see Working with extensions and foreign data wrappers in the *Amazon Aurora User Guide*.

Extensions supported for Aurora PostgreSQL 18

The following table shows the extension versions supported for each Aurora PostgreSQL 18 release.

Extension	18.4	18.3
address_standardizer	3.6.3	3.6.1
address_standardizer_data_us	3.6.3	3.6.1
amcheck	1.4	1.4
apg_plan_mgmt	3.0	3.0
aurora_stat_utils	1.0	1.0
auto_explain	Yes	Yes
autoinc (contrib-spi)	1.0	1.0
aws_commons	1.2	1.2
aws_lambda	2.1	2.1
aws_ml	2.0	2.0
aws_s3	2.0	2.0
bloom	1.0	1.0
bool_plperl	1.3	1.3
btree_gin	1.3	1.3

Extension	18.4	18.3
btree_gist	1.6	1.6
citext	1.6	1.6
cube	1.5	1.5
dblink	1.2	1.2
dict_int	1.0	1.0
dict_xsyn	1.0	1.0
earthdistance	1.2	1.2
fuzzystrmatch	1.1	1.1
h3-pg	4.2.3	4.2.3
h3-postgis	4.1.3	4.1.3
hll	2.2	2.2
hstore	1.8	1.8
hstore_plperl	1.0	1.0
hypopg	1.4.2	1.4.2
ICU module	ICU module	ICU module
insert_username (contrib-spi)	1.0	1.0
intagg	1.1	1.1
intarray	1.5	1.5
ip4r	2.4	2.4
isn	1.2	1.2

Extension	18.4	18.3
jsonb_plperl	1.0	1.0
lo	1.1	1.1
log_fdw	1.3	1.3
ltree	1.3	1.3
moddatetime (contrib-spi)	1.0	1.0
mysql_fdw	2.9.3	2.9.3
oracle_fdw	2.8.0	2.8.0
orafce	4.16.3	4.16.3
pg_ad_mapping	1.0	1.0
pg_bigm	1.2_20250903	1.2_20250903
pg_buffercache	1.5	1.5
pg_columnmask	1.1.0	1.1.0
pg_cron	1.6.7	1.6.7
pg_freespacemap	1.2	1.2
pg_hint_plan	1.8.0	1.8.0
pg_partman	5.4.3	5.2.4
pg_prewarm	1.2	1.2
pg_proctab	0.0.12	0.0.12
pg_repack	1.5.3	1.5.3
pg_roaringbitmap	1.1.0	1.1.0

Extension	18.4	18.3
pg_similarity	1.0	1.0
pg_stat_statements	1.11	1.11
pg_tle	1.5.2	1.5.2
pg_trgm	1.6	1.6
pg_visibility	1.2	1.2
pgAudit	18	18
pgcrypto	1.3	1.3
pgdam	1.7	1.7
pglogical	2.4.6	2.4.6
pglogical_origin	1.0.0	1.0.0
pgrouting	3.8.0	3.8.0
pgrowlocks	1.2	1.2
pgstattuple	1.5	1.5
pgtap	1.3.4	1.3.3
pgvector	0.8.2	0.8.1
plcoffee	3.2.4	3.2.4
plls	3.2.4	3.2.4
plperl	1.0	1.0
plpgsql	1.0	1.0
plprofiler	4.2.4	4.2.4

Extension	18.4	18.3
pltcl	1.0	1.0
plv8	3.2.4	3.2.4
PostGIS	3.6.3	3.6.1
postgis_raster	3.6.3	3.6.1
postgis_tiger_geocoder	3.6.3	3.6.1
postgis_topology	3.6.3	3.6.1
postgres_fdw	1.1	1.1
prefix	1.2.10	1.2.10
rdkit	4.6.1 (2024_09_6)	4.6.1 (2024_09_6)
rds_activity_stream	1.7	1.7
rds_tools	1.9	1.9
refint (contrib-spi)	1.0	1.0
SEG	1.0	1.0
sslinfo	1.2	1.2
tablefunc	1.0	1.0
TCN	1.0	1.0
tds_fdw	2.0.5	2.0.5
tsm_system_rows	1.0	1.0
tsm_system_time	1.0	1.0
unaccent	1.1	1.1

Extension	18.4	18.3
uuid-ossp	1.1	1.1
wal2json	2.6	2.6

Extensions supported for Aurora PostgreSQL 17

The following table shows the PostgreSQL extension versions that are currently supported on Aurora PostgreSQL 17 versions. "NA" indicates that the extension isn't available for that PostgreSQL version. For more information about PostgreSQL extensions, see Packaging Related Objects into an Extension in the PostgreSQL documentation.

Extension	17.10	17.9	17.7	17.6	17.5	17.4
address_standardizer	3.5.6	3.5.1	3.5.1	3.5.1	3.5.1	3.5.1
address_standardizer_data_us	3.5.6	3.5.1	3.5.1	3.5.1	3.5.1	3.5.1
amcheck	1.4	1.4	1.4	1.4	1.4	1.4
apg_plan_mgmt	2.9	2.9	2.9	2.9	2.9	2.8
aurora_stat_utils	1.0	1.0	1.0	1.0	1.0	1.0
auto_explain	Yes	Yes	Yes	Yes	Yes	Yes
autoinc (contrib-spi)	1.0	1.0	1.0	1.0	1.0	1.0

Extension	17.10	17.9	17.7	17.6	17.5	17.4
aws_commons	1.2	1.2	1.2	1.2	1.2	1.2
aws_lambda	2.0	2.0	2.0	2.0	1.0	1.0
aws_ml	2.0	2.0	2.0	2.0	2.0	2.0
aws_s3	2.0	2.0	1.2	1.2	1.2	1.2
bloom	1.0	1.0	1.0	1.0	1.0	1.0
bool_plperl	1.3	1.3	1.3	1.3	1.3	1.3
btree_gin	1.3	1.3	1.3	1.3	1.3	1.3
btree_gist	1.6	1.6	1.6	1.6	1.6	1.6
citext	1.6	1.6	1.6	1.6	1.6	1.6
cube	1.5	1.5	1.5	1.5	1.5	1.5
dblink	1.2	1.2	1.2	1.2	1.2	1.2
dict_int	1.0	1.0	1.0	1.0	1.0	1.0
dict_xsyn	1.0	1.0	1.0	1.0	1.0	1.0
earthdistance	1.2	1.2	1.2	1.2	1.2	1.2
fuzzystrmatch	1.1	1.1	1.1	1.1	1.1	1.1
h3-pg	4.2.3	4.2.3	4.2.3	4.1.3	4.1.3	4.1.3
h3-postgis	4.1.3	4.1.3	4.1.3	4.1.3	4.1.3	4.1.3

Extension	17.10	17.9	17.7	17.6	17.5	17.4
hll	2.2	2.2	2.2	2.2	2.2	2.2
hstore	1.8	1.8	1.8	1.8	1.8	1.8
hstore_plperl	1.0	1.0	1.0	1.0	1.0	1.0
hypopg	1.4.2	1.4.2	1.4.1	1.4.1	1.4.1	
ICU module	ICU module	ICU module	ICU module	ICU module	ICU module	60.2
insert_username (contrib-spi)	1.0	1.0	1.0	1.0	1.0	1.0
intagg	1.1	1.1	1.1	1.1	1.1	1.1
intarray	1.5	1.5	1.5	1.5	1.5	1.5
ip4r	2.4	2.4	2.4	2.4	2.4	2.4
isn	1.2	1.2	1.2	1.2	1.2	1.2
jsonb_plperl	1.0	1.0	1.0	1.0	1.0	1.0
lo	1.1	1.1	1.1	1.1	1.1	1.1
log_fdw	1.3	1.3	1.3	1.3	1.3	1.3
ltree	1.3	1.3	1.3	1.3	1.3	1.3
moddatetime (contrib-spi)	1.0	1.0	1.0	1.0	1.0	1.0

Extension	17.10	17.9	17.7	17.6	17.5	17.4
mysql_fdw	2.9.3	2.9.3	2.9.2	2.9.2	2.9.2	2.9.2
oracle_fdw	2.8.0	2.8.0	2.8.0	2.8.0	2.7.0	2.7.0
orafce	4.16.3	4.16.3	4.14.0	4.14.0	4.14.0	4.14.0
pg_ad_mapping	1.0	1.0	1.0	1.0	1.0	1.0
pg_bigm	1.2_20250903	1.2_20250903	1.2	1.2	1.2	1.2
pg_buffercache	1.5	1.5	1.5	1.5	1.5	1.5
pg_columnmask	1.1.0	1.1.0	1.1.0	1.0.0	–	–
pg_cron	1.6.7	1.6.7	1.6.5	1.6.5	1.6.5	1.6.5
pg_freespacemap	1.2	1.2	1.2	1.2	1.2	1.2
pg_hint_plan	1.7.1	1.7.1	1.7.0	1.7.0	1.7.0	1.7.0
pg_partman	5.4.3	5.2.4	5.2.4	5.2.4	5.2.4	5.2.4
pg_prewarm	1.2	1.2	1.2	1.2	1.2	1.2
pg_proctab	0.0.12	0.0.12	0.0.12	0.0.12	0.0.12	0.0.12
pg_repack	1.5.3	1.5.3	1.5.2	1.5.2	1.5.1	1.5.1

Extension	17.10	17.9	17.7	17.6	17.5	17.4
pg_similarity	1.0	1.0	1.0	1.0	1.0	1.0
pg_stat_statements	1.11	1.11	1.11	1.11	1.11	1.11
pg_tle	1.5.2	1.5.2	1.5.2	1.4.0	1.4.0	1.4.0
pg_trgm	1.6	1.6	1.6	1.6	1.6	1.6
pg_visibility	1.2	1.2	1.2	1.2	1.2	1.2
pgAudit	17.1	17.1	17.1	17.1	17.1	17.0
pgcrypto	1.3	1.3	1.3	1.3	1.3	1.3
pgdam	1.7	1.7	1.7	1.7	1.7	1.7
pglogical	2.4.6	2.4.6	2.4.5	2.4.5	2.4.5	2.4.5
pglogical_origin	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0
pgrouting	3.6.3	3.6.3	3.6.3	3.6.3	3.6.3	3.6.3
pgrowlocks	1.2	1.2	1.2	1.2	1.2	1.2
pgstattuple	1.5	1.5	1.5	1.5	1.5	1.5
pgtap	1.3.4	1.3.3	1.3.3	1.3.3	1.3.3	1.3.3
pgvector	0.8.2	0.8.1	0.8.0	0.8.0	0.8.0	0.8.0
plcoffee	3.1.6	3.1.6	3.1.6	3.1.6	3.1.6	3.1.6
plls	3.1.6	3.1.6	3.1.6	3.1.6	3.1.6	3.1.6

Extension	17.10	17.9	17.7	17.6	17.5	17.4
plperl	1.0	1.0	1.0	1.0	1.0	1.0
plpgsql	1.0	1.0	1.0	1.0	1.0	1.0
plprofiler	4.2.4	4.2.4	4.2.4	4.2.4	4.2.4	4.2.4
pltcl	1.0	1.0	1.0	1.0	1.0	1.0
plv8	3.1.10	3.1.10	3.1.10	3.1.10	3.1.10	3.1.10
PostGIS	3.5.6	3.5.1	3.5.1	3.5.1	3.5.1	3.5.1
postgis_raster	3.5.6	3.5.1	3.5.1	3.5.1	3.5.1	3.5.1
postgis_tiger_geocoder	3.5.6	3.5.1	3.5.1	3.5.1	3.5.1	3.5.1
postgis_topology	3.5.6	3.5.1	3.5.1	3.5.1	3.5.1	3.5.1
postgres_fdw	1.1	1.1	1.1	1.1	1.1	1.1
prefix	1.2.10	1.2.10	1.2.10	1.2.10	1.2.10	1.2.10
rdkit	4.6.1 (2024_09_6)	4.6.1 (2024_09_6)	4.6.1 (2024_09_6)	4.6.1 (2024_09_6)	4.6.1 (2024_09_6)	4.6.1 (Release_2024_09_3)
rds_activity_stream	1.7	1.7	1.7	1.7	1.7	1.7
rds_tools	1.9	1.9	1.9	1.9	1.9	1.9

Extension	17.10	17.9	17.7	17.6	17.5	17.4
refint (contrib-spi)	1.0	1.0	1.0	1.0	1.0	1.0
SEG	1.0	1.0	1.0	1.0	1.0	1.0
sslinfo	1.2	1.2	1.2	1.2	1.2	1.2
tablefunc	1.0	1.0	1.0	1.0	1.0	1.0
TCN	1.0	1.0	1.0	1.0	1.0	1.0
tds_fdw	2.0.5	2.0.5	2.0.4	2.0.4	2.0.4	2.0.4
tsm_system_rows	1.0	1.0	1.0	1.0	1.0	1.0
tsm_system_time	1.0	1.0	1.0	1.0	1.0	1.0
unaccent	1.1	1.1	1.1	1.1	1.1	1.1
uuid-ossp	1.1	1.1	1.1	1.1	1.1	1.1
wal2json	2.6	2.6	2.6	2.6	2.6	2.6

Extensions supported for Aurora PostgreSQL 16

The following table shows the PostgreSQL extension versions that are currently supported on Aurora PostgreSQL 16 versions. "NA" indicates that the extension isn't available for that PostgreSQL version. For more information about PostgreSQL extensions, see Packaging Related Objects into an Extension in the PostgreSQL documentation.

Extens	16.14	16.13	16.11	16.10	16.9	16.8	16.6	16.4	16.3	16.2	16.1
addres tandar er	3.5.6	3.5.1	3.5.1	3.5.1	3.5.1	3.5.1	3.4.3	3.4.0	3.4.0	3.4.0	3.4.0
addres tandar er_data s	3.5.6	3.5.1	3.5.1	3.5.1	3.5.1	3.5.1	3.4.3	3.4.0	3.4.0	3.4.0	3.4.0
amche	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
apg_pl mgmt	2.9	2.9	2.9	2.9	2.9	2.8	2.7	2.7	2.7	2.6	2.6
aurora_ at_utils	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
auto_e ain	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
autoinc (contril spi)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
aws_co ns	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
aws_la a	2.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
aws_m	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
aws_s3	2.0	2.0	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
bloom	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Extens	16.14	16.13	16.11	16.10	16.9	16.8	16.6	16.4	16.3	16.2	16.1
bool_p rl	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
btree_	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
btree_ t	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
citext	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
cube	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
dblink	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
dict_in	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
dict_xs	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
earthdi ance	1.2	1.2	1.2	1.2	1.2	1.2	1.1	1.1	1.1	1.1	1.1
fuzzyst atch	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
h3-pg	4.2.3	4.2.3	4.2.3	4.1.3	4.1.3	4.1.3	4.1.3	4.1.3	4.1.3	4.1.3	4.1.3
h3-postgi s	4.1.3	4.1.3	4.1.3	4.1.3	4.1.3	4.1.3	4.1.3	4.1.3	4.1.3	4.1.3	4.1.3
hll	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
hstore	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
hstore_ perl	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
hypopg	1.4.2	1.4.2	1.4.1	1.4.1	1.4.1	1.4.0	1.4.0	1.4.0	1.4.0	1.4.0	1.4.0

Extens	16.14	16.13	16.11	16.10	16.9	16.8	16.6	16.4	16.3	16.2	16.1
ICU module	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2
insert_ername (contrib spi)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
intagg	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
intarra	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
ip4r	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
isn	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
jsonb_perl	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
lo	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
log_fdw	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
ltree	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
moddatime (contrib spi)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
mysql_	2.9.3	2.9.3	2.9.2	2.9.2	2.9.2	2.9.2	2.9.2	2.9.2	2.9.1	2.9.1	2.9.1
oracle_w	2.8.0	2.8.0	2.8.0	2.8.0	2.7.0	2.7.0	2.6.0	2.6.0	2.6.0	2.6.0	2.6.0
orafce	4.16.3	4.16.3	4.14.0	4.14.0	4.14.0	4.14.0	4.12.0	4.10.3	4.9.4	4.6.0	4.6.0

Extens	16.14	16.13	16.11	16.10	16.9	16.8	16.6	16.4	16.3	16.2	16.1
pg_ad_ping	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.1	0.1	0.1
pg_big	1.2_20903	1.2_20903	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
pg_buf cache	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
pg_colu mask	1.1.0	1.1.0	1.1.0	1.0.0	–	–	–	–	–	–	–
pg_cro	1.6.7	1.6.7	1.6.5	1.6.5	1.6.5	1.6.5	1.6.4	1.6.3	1.6.2	1.6.0	1.6.0
pg_free acemap	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
pg_hin lan	1.6.2	1.6.2	1.6.1	1.6.1	1.6.1	1.6.1	1.6.1	1.6.0	1.6.0	1.6.0	1.6.0
pg_par n	5.4.3	5.2.4	5.2.4	5.2.4	5.2.4	5.2.4	5.1.0	5.1.0	5.1.0	4.7.3	4.7.3
pg_pre m	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
pg_pro b	0.0.10	0.0.10	0.0.10	0.0.10	0.0.10	0.0.10	0.0.10	0.0.10	0.0.10	0.0.10	0.0.10
pg_rep	1.5.3	1.5.3	1.5.2	1.5.2	1.5.1	1.5.0	1.5.0	1.5.0	1.5.0	1.4.8	1.4.8
pg_sim rity	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
pg_sta tateme	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
pg_tle	1.5.2	1.5.2	1.5.2	1.4.0	1.4.0	1.4.0	1.4.0	1.4.0	1.4.0	1.3.4	1.2.0

Extens	16.14	16.13	16.11	16.10	16.9	16.8	16.6	16.4	16.3	16.2	16.1
pg_trgr	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
pg_visi lity	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
pgAudi	16.1	16.1	16.1	16.1	16.1	16.0	16.0	16.0	16.0	16.0	16.0
pgcryp	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
pgdam	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
pglogic	2.4.6	2.4.6	2.4.5	2.4.5	2.4.5	2.4.4	2.4.4	2.4.4	2.4.4	2.4.4	2.4.4
pglogic _origin	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0
pgrout	3.6.3	3.6.3	3.6.3	3.6.3	3.6.3	3.6.3	3.6.2	3.6.2	3.6.2	3.4.1	3.4.1
pgrowl s	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
pgstatt le	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
pgtap	1.3.4	1.3.3	1.3.3	1.3.3	1.3.3	1.3.3	1.3.3	1.3.3	1.3.2	1.3.0	1.3.0
pgvect	0.8.2	0.8.1	0.8.0	0.8.0	0.8.0	0.8.0	0.7.4	0.7.3	0.7.0	0.5.1	0.5.1
plcoffe	3.1.6	3.1.6	3.1.6	3.1.6	3.1.6	3.1.6	3.1.6	3.1.6	3.1.6	3.1.6	3.1.6
plls	3.1.6	3.1.6	3.1.6	3.1.6	3.1.6	3.1.6	3.1.6	3.1.6	3.1.6	3.1.6	3.1.6
plperl	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
plpgsq	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
plprofi r	4.2.4	4.2.4	4.2.4	4.2.4	4.2.4	4.2.4	4.2.4	4.2.4	4.2.4	4.2.4	4.2.4

Extens	16.14	16.13	16.11	16.10	16.9	16.8	16.6	16.4	16.3	16.2	16.1
pltcl	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
plv8	3.1.10	3.1.10	3.1.10	3.1.10	3.1.10	3.1.10	3.1.10	3.1.10	3.1.10	3.1.10	3.1.8
PostGI	3.5.6	3.5.1	3.5.1	3.5.1	3.5.1	3.5.1	3.4.3	3.4.2	3.4.2	3.4.0	3.4.0
postgis aster	3.5.6	3.5.1	3.5.1	3.5.1	3.5.1	3.5.1	3.4.3	3.4.2	3.4.2	3.4.0	3.4.0
postgis iger_ge oder	3.5.6	3.5.1	3.5.1	3.5.1	3.5.1	3.5.1	3.4.3	3.4.2	3.4.2	3.4.0	3.4.0
postgis opolog	3.5.6	3.5.1	3.5.1	3.5.1	3.5.1	3.5.1	3.4.3	3.4.2	3.4.2	3.4.0	3.4.0
postgr fdw	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
prefix	1.2.10	1.2.10	1.2.10	1.2.10	1.2.10	1.2.10	1.2.10	1.2.10	1.2.10	1.2.10	1.2.10
rdkit	4.6.1 (2024_ 6)	4.6.1 (2024_ 6)	4.6.1 (2024_ 6)	4.6.1 (2024_ 6)	4.6.1 (2024_ 6)	4.6.1 (Releas 2024_( )	4.6.0 (Releas 2024_( )	4.5.0 (Releas 2024_( )	4.4.0 (Releas 2024_( )	4.4.0 (Releas 2023_( )	4.4.0
rds_act ity_stre m	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
rds_toc	1.9	1.9	1.9	1.9	1.9	1.9	1.0	1.0	1.0	1.0	1.0
refint (contril spi)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
SEG	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Extens	16.14	16.13	16.11	16.10	16.9	16.8	16.6	16.4	16.3	16.2	16.1
sslinfo	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
tablefu	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
TCN	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
tds_fdv	2.0.5	2.0.5	2.0.4	2.0.4	2.0.4	2.0.4	2.0.3	2.0.3	2.0.3	2.0.3	2.0.3
tsm_sy m_row	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
tsm_sy m_time	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
unacce	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
uuid-ossp	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
wal2jsc	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.5	2.5	2.5

Extensions supported for Aurora PostgreSQL 15

The following table shows the PostgreSQL extension versions that are currently supported on Aurora PostgreSQL 15 versions. "NA" indicates that the extension isn't available for that PostgreSQL version. For more information about PostgreSQL extensions, see Packaging Related Objects into an Extension in the PostgreSQL documentation.

Exter	15.18	15.17	15.15	15.14	15.13	15.12	15.10	15.8	15.7	15.6	15.5	15.4	15.3	15.2
addre tanda er	3.5.6	3.5.1	3.5.1	3.5.1	3.5.1	3.5.1	3.4.3	3.4.0	3.4.0	3.4.0	3.4.0	3.3.3	3.3.2	3.3.2
addre tanda	3.5.6	3.5.1	3.5.1	3.5.1	3.5.1	3.5.1	3.4.3	3.4.0	3.4.0	3.4.0	3.4.0	3.3.3	3.3.2	3.3.2

Exter	15.18	15.17	15.15	15.14	15.13	15.12	15.10	15.8	15.7	15.6	15.5	15.4	15.3	15.2
er_da s														
amch	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
apg_l mgm	2.9	2.9	2.9	2.9	2.9	2.8	2.7	2.7	2.7	2.6	2.6	2.5	2.4	2.4
auror at_ut	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
auto_ ain	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
autoi (cont spi)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
aws_ ns	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
aws_l a	2.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
aws_	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.0	1.0	1.0
aws_	2.0	2.0	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.1	1.1
bloor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
bool_ rl	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
btree	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
btree t	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
citext	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6

Exter	15.18	15.17	15.15	15.14	15.13	15.12	15.10	15.8	15.7	15.6	15.5	15.4	15.3	15.2
cube	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
dblin	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
dict_i	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
dict_	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
earth ance	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
fuzzy atch	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
h3-pg	4.2.3	4.2.3	4.2.3	4.1.3	4.1.3	4.1.3	4.1.3	4.1.3	4.1.3	4.1.3	4.1.3	N/A	N/A	N/A
h3-postgis	4.1.3	4.1.3	4.1.3	4.1.3	4.1.3	4.1.3	4.1.3	4.1.3	4.1.3	4.1.3	4.1.3	N/A	N/A	N/A
hll	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
hstor	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
hstor perl	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
hypo	1.4.2	1.4.2	1.4.1	1.4.1	1.4.1	1.4.1	1.4.1	1.4.1	1.4.0	1.4.0	1.4.0	N/A	N/A	N/A
ICU modu	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2
insert ernar (cont spi)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Exter	15.18	15.17	15.15	15.14	15.13	15.12	15.10	15.8	15.7	15.6	15.5	15.4	15.3	15.2
intag	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
intarr	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
ip4r	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
isn	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
jsonb erl	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
lo	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
log_f	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
ltree	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
modc me (cont spi)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
mysq	2.9.3	2.9.3	2.9.2	2.9.2	2.9.2	2.9.2	2.9.2	2.9.2	2.9.1	2.9.1	2.9.1	2.9.0	N/A	N/A
oracl w	2.8.0	2.8.0	2.8.0	2.8.0	2.7.0	2.7.0	2.6.0	2.6.0	2.6.0	2.6.0	2.6.0	2.5.0	2.5.0	2.5.0
orafc	4.16.	4.16.	4.14.	4.14.	4.14.	4.14.	4.12.	4.10.	4.9.4	4.6.0	4.6.0	4.3.0	4.0.0	4.0.0
pg_a ping	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.1	0.1	0.1	N/A	N/A	N/A
pg_bi	1.2_2 903	1.2_2 903	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
pg_b cache	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3

Exter	15.18	15.17	15.15	15.14	15.13	15.12	15.10	15.8	15.7	15.6	15.5	15.4	15.3	15.2
pg_cr	1.6.7	1.6.7	1.6.5	1.6.5	1.6.5	1.6.5	1.6.4	1.6.3	1.6.2	1.6.0	1.6.0	1.5	1.5	1.4.2
pg_fr acem	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
pg_hi lan	1.5.3	1.5.3	1.5.2	1.5.2	1.5.2	1.5.2	1.5.2	1.5.1	1.5.1	1.5.1	1.5.1	1.5.0	1.5.0	1.5.0
pg_p n	5.4.3	5.2.4	5.2.4	5.2.4	5.2.4	5.2.4	5.1.0	5.1.0	5.1.0	4.7.3	4.7.3	4.7.3	4.7.3	4.6.0
pg_p m	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
pg_p b	0.0.1(	0.0.1(	0.0.1(	0.0.1(	0.0.1(	0.0.1(	0.0.1(	0.0.1(	0.0.1(	0.0.1(	0.0.1(	0.0.9	0.0.9	0.0.9
pg_re	1.5.3	1.5.3	1.5.2	1.5.2	1.5.1	1.5.0	1.5.0	1.5.0	1.5.0	1.4.8	1.4.8	1.4.8	1.4.8	1.4.8
pg_si rity	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
pg_st tatem	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
pg_tl	1.5.2	1.5.2	1.5.2	1.4.0	1.4.0	1.4.0	1.4.0	1.4.0	1.4.0	1.3.4	1.2.0	1.1.1	1.0.3	1.0.1
pg_tr	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
pg_vi lity	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
pgAu	1.7.1	1.7.1	1.7.1	1.7.1	1.7.1	1.7.0	1.7.0	1.7.0	1.7.0	1.7.0	1.7.0	1.7.0	1.7.0	1.7.0
pgcry	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
pgloc	2.4.6	2.4.6	2.4.5	2.4.5	2.4.5	2.4.3	2.4.3	2.4.3	2.4.3	2.4.3	2.4.3	2.4.3	2.4.2	2.4.2

Exter	15.18	15.17	15.15	15.14	15.13	15.12	15.10	15.8	15.7	15.6	15.5	15.4	15.3	15.2
pgloc _origi	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0
pgrou	3.6.3	3.6.3	3.6.3	3.6.3	3.6.3	3.6.3	3.6.2	3.6.2	3.6.2	3.4.1	3.4.1	3.4.1	3.4.1	3.4.1
pgrov s	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
pgsta le	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
pgtap	1.3.4	1.3.3	1.3.3	1.3.3	1.3.3	1.3.3	1.3.3	1.3.3	1.3.2	1.2.0	1.2.0	1.2.0	1.2.0	1.2.0
pgvec	0.8.2	0.8.1	0.8.0	0.8.0	0.8.0	0.8.0	0.7.4	0.7.3	0.7.0	0.5.1	0.5.1	0.5.0	0.4.1	N/A
plcofi	3.1.8	3.1.8	3.1.8	3.1.8	3.1.8	3.1.8	3.1.8	3.1.8	3.1.8	3.1.8	3.1.8	3.1.6	3.1.6	3.1.4
plls	3.1.8	3.1.8	3.1.8	3.1.8	3.1.8	3.1.8	3.1.8	3.1.8	3.1.8	3.1.8	3.1.8	3.1.6	3.1.6	3.1.4
plper	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
plpgs	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
plpro r	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
pltcl	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
plv8	3.1.1(	3.1.1(	3.1.1(	3.1.1(	3.1.1(	3.1.1(	3.1.1(	3.1.1(	3.1.1(	3.1.1(	3.1.8	3.1.6	3.1.6	3.1.4
PostG	3.5.6	3.5.1	3.5.1	3.5.1	3.5.1	3.5.1	3.4.3	3.4.2	3.4.2	3.4.0	3.4.0	3.3.3	3.3.2	3.3.2
postg aster	3.5.6	3.5.1	3.5.1	3.5.1	3.5.1	3.5.1	3.4.3	3.4.2	3.4.2	3.4.0	3.4.0	3.3.3	3.3.2	3.3.2
postg iger_ oder	3.5.6	3.5.1	3.5.1	3.5.1	3.5.1	3.5.1	3.4.3	3.4.2	3.4.2	3.4.0	3.4.0	3.3.3	3.3.2	3.3.2

Exter	15.18	15.17	15.15	15.14	15.13	15.12	15.10	15.8	15.7	15.6	15.5	15.4	15.3	15.2
postg opolo	3.5.6	3.5.1	3.5.1	3.5.1	3.5.1	3.5.1	3.4.3	3.4.2	3.4.2	3.4.0	3.4.0	3.3.3	3.3.2	3.3.2
postg fdw	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
prefix	1.2.1(	1.2.1(	1.2.1(	1.2.1(	1.2.1(	1.2.1(	1.2.1(	1.2.1(	1.2.1(	1.2.1(	1.2.1(	1.2.8	1.2.8	1.2.8
rdkit	4.6.1 (2024 6)	4.6.1 (2024 6)	4.6.1 (2024 6)	4.6.1 (2024 6)	4.6.1 (2024 6)	4.6.1 (Relea 2024)	4.6.0 (Relea 2024)	4.5.0 (Relea 2024)	4.4.0 (Relea 2024)	4.4.0 (Relea 2023)	4.4.0 (Relea 2023)	4.3	4.2	4.2
rds_a ity_st m	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
rds_t	1.9	1.9	1.9	1.9	1.9	1.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
refint (cont spi)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
SEG	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
sslinf	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
table	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
TCN	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
tds_f	2.0.5	2.0.5	2.0.4	2.0.4	2.0.4	2.0.4	2.0.3	2.0.3	2.0.3	2.0.3	2.0.3	2.0.3	2.0.3	2.0.3
tsm_s m_ro	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
tsm_s m_tir	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Exter	15.18	15.17	15.15	15.14	15.13	15.12	15.10	15.8	15.7	15.6	15.5	15.4	15.3	15.2
unacc	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
uuid-ossp	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
wal2j	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.5	2.5	2.5	2.5	2.5	2.5

Extensions supported for Aurora PostgreSQL 14

The following table shows the PostgreSQL extension versions that are currently supported on Aurora PostgreSQL 14 versions. "NA" indicates that the extension isn't available for that PostgreSQL version. For more information about PostgreSQL extensions, see Packaging Related Objects into an Extension in the PostgreSQL documentation.

Exte	14.2	14.2	14.2	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.9	14.8	14.7	14.6	14.5	14.4	14.3
addtancer	3.5.	3.5.	3.5.	3.5.	3.5.	3.5.	3.4.	3.4.	3.4.	3.4.	3.4.	3.3.	3.3.	3.3.	3.2.	3.2.	3.2.	3.1.7
addtancer_cs	3.5.	3.5.	3.5.	3.5.	3.5.	3.5.	3.4.	3.4.	3.4.	3.4.	3.4.	3.3.	3.3.	3.3.	3.2.	3.2.	3.2.	3.1.7
amc	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
apgmgr	2.9	2.9	2.9	2.9	2.9	2.8	2.7	2.7	2.7	2.6	2.6	2.5	2.4	2.4	2.4	2.3	2.2	2.2
aurcat_u	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
autain	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Exte	14.2	14.2	14.2	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.9	14.8	14.7	14.6	14.5	14.4	14.3
autc (cor spi)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
aws ns	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
aws a	2.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
aws	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
aws	2.0	2.0	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.1	1.1	1.1	1.1	1.1	1.1
bloc	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
boo rl	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
btre	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
btre t	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
cite	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
cub	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
dbli	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
dict	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
dict	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
eart anc	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
fuzz atch	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1

Exte	14.2	14.2	14.2	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.9	14.8	14.7	14.6	14.5	14.4	14.3
h3-pg	4.2.	4.2.	4.2.	4.1.	4.1.	4.1.	4.1.	4.1.	4.1.	4.1.	4.1.	N/A	N/A	N/A	N/A	N/A	N/A	N/A
h3-posts	4.1.	4.1.	4.1.	4.1.	4.1.	4.1.	4.1.	4.1.	4.1.	4.1.	4.1.	N/A	N/A	N/A	N/A	N/A	N/A	N/A
hll	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
hstc	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
hstc perl	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
hyp	1.4.	1.4.	1.4.	1.4.	1.4.	1.4.	1.4.	1.4.	1.4.	1.4.	1.4.	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ICU mod	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2
inse erna (cor spi)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
inta	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
inta	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
ip4r	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
isn	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
json erl	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
lo	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1

Exte	14.2	14.2	14.2	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.9	14.8	14.7	14.6	14.5	14.4	14.3
log_	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
ltree	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
moc me (cor spi)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
mys	2.9.	2.9.	2.9.	2.9.	2.9.	2.9.	2.9.	2.9.	2.9.	2.9.	2.9.	2.9.	N/A	N/A	N/A	N/A	N/A	N/A
orac w	2.8.	2.8.	2.8.	2.8.	2.7.	2.7.	2.6.	2.6.	2.6.	2.6.	2.6.	2.5.	2.5.	2.5.	2.4.	2.4.	2.4.	2.4.0
oraf	4.16	4.16	4.14	4.14	4.14	4.14	4.12	4.10	4.9.	4.6.	4.6.	4.3.	4.0.	4.0.	3.2	3.2	3.2	3.2
pg_ ping	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.1	0.1	0.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pg_	1.2_ 903	1.2_ 903	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
pg_ cach	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
pg_	1.6.	1.6.	1.6.	1.6.	1.6.	1.6.	1.6.	1.6.	1.6.	1.6.	1.6.	1.5	1.5	1.4.	1.4	1.4	1.4	1.4
pg_ acer	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
pg_ lan	1.4.	1.4.	1.4.	1.4.	1.4.	1.4.	1.4.	1.4.	1.4.	1.4.	1.4.	1.4.	1.4.	1.4.	1.4	1.4	1.4	1.4
pg_ n	5.4.	5.2.	5.2.	5.2.	5.2.	5.2.	5.1.	5.1.	5.1.	4.7.	4.7.	4.7.	4.7.	4.6.	4.6.	4.6.	4.6.	4.6.0

Exte	14.2	14.2	14.2	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.9	14.8	14.7	14.6	14.5	14.4	14.3
pg_m	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
pg_b	0.0.	0.0.	0.0.	0.0.	0.0.	0.0.	0.0.	0.0.	0.0.	0.0.	0.0.	0.0.	0.0.	0.0.	0.0.	0.0.	0.0.	0.0.9
pg_	1.5.	1.5.	1.5.	1.5.	1.5.	1.5.	1.5.	1.5.	1.5.	1.4.	1.4.	1.4.	1.4.	1.4.	1.4.	1.4.	1.4.	1.4.7
pg_rity	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
pg_tate	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
pg_	1.5.	1.5.	1.5.	1.4.	1.4.	1.4.	1.4.	1.4.	1.4.	1.3.	1.2.	1.1.	1.0.	1.0.	1.0.	1.0.	N/A	N/A
pg_	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
pg_lity	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
pgA	1.6.	1.6.	1.6.	1.6.	1.6.	1.6.	1.6.	1.6.	1.6.	1.6.	1.6.	1.6.	1.6.	1.6.	1.6.	1.6.	1.6.	1.6.1
pgc	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
pglc	2.4.	2.4.	2.4.	2.4.	2.4.	2.4.	2.4.	2.4.	2.4.	2.4.	2.4.	2.4.	2.4.	2.4.	2.4.	2.4.	2.4.	2.4.1
pglc_ori	1.0.	1.0.	1.0.	1.0.	1.0.	1.0.	1.0.	1.0.	1.0.	1.0.	1.0.	1.0.	1.0.	1.0.	1.0.	1.0.	1.0.	1.0.0
pgr	3.6.	3.6.	3.6.	3.6.	3.6.	3.6.	3.6.	3.6.	3.6.	3.4.	3.4.	3.4.	3.4.	3.4.	3.2.	3.2.	3.2.	3.2.0
pgrs	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
pgstle	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5

Exte	14.2	14.2	14.2	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.9	14.8	14.7	14.6	14.5	14.4	14.3
pgta	1.3.	1.3.	1.3.	1.3.	1.3.	1.3.	1.3.	1.3.	1.3.	1.2.	1.2.	1.2.	1.2.	1.2.	1.2.	1.2.	1.2.	1.2.0
pgv	0.8.	0.8.	0.8.	0.8.	0.8.	0.8.	0.7.	0.7.	0.7.	0.5.	0.5.	0.5.	0.4.	N/A	N/A	N/A	N/A	N/A
plcc	3.1.	3.1.	3.1.	3.1.	3.1.	3.1.	3.1.	3.1.	3.1.	3.1.	3.1.	3.1.	3.1.	3.1.	3.0.	3.0.	3.0.	2.3.15
plls	3.1.	3.1.	3.1.	3.1.	3.1.	3.1.	3.1.	3.1.	3.1.	3.1.	3.1.	3.1.	3.1.	3.1.	3.0.	3.0.	3.0.	2.3.15
plpe	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
plpc	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
plpr r	4.2.	4.2.	4.2.	4.2.	4.2.	4.2.	4.2.	4.2.	4.2.	4.2.	4.2.	4.2.	4.2.	4.2.	4.1	4.1	4.1	4.1
pltc	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
plv8	3.1.	3.1.	3.1.	3.1.	3.1.	3.1.	3.1.	3.1.	3.1.	3.1.	3.1.	3.1.	3.1.	3.1.	3.0.	3.0.	3.0.	2.3.15
Post	3.5.	3.5.	3.5.	3.5.	3.5.	3.5.	3.4.	3.4.	3.4.	3.4.	3.4.	3.3.	3.3.	3.3.	3.2.	3.2.	3.2.	3.1.7
post aste	3.5.	3.5.	3.5.	3.5.	3.5.	3.5.	3.4.	3.4.	3.4.	3.4.	3.4.	3.3.	3.3.	3.3.	3.2.	3.2.	3.2.	3.1.7
post iger ode	3.5.	3.5.	3.5.	3.5.	3.5.	3.5.	3.4.	3.4.	3.4.	3.4.	3.4.	3.3.	3.3.	3.3.	3.2.	3.2.	3.2.	3.1.7
post opo	3.5.	3.5.	3.5.	3.5.	3.5.	3.5.	3.4.	3.4.	3.4.	3.4.	3.4.	3.3.	3.3.	3.3.	3.2.	3.2.	3.2.	3.1.7
post fdw	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
pref	1.2.	1.2.	1.2.	1.2.	1.2.	1.2.	1.2.	1.2.	1.2.	1.2.	1.2.	1.2.	1.2.	1.2.	1.2.	1.2.	1.2.	1.2.8

Exte	14.2	14.2	14.2	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.9	14.8	14.7	14.6	14.5	14.4	14.3
rdki	4.6.(202 6)	4.6.(202 6)	4.6.(202 6)	4.6.(202 6)	4.6.(202 6)	4.6.(Rel 202)	4.6.(Rel 202)	4.5.(Rel 202)	4.4.(Rel 202)	4.4.(Rel 202)	4.4.(Rel 202)	4.3	4.2	4.2	4.2	3.8	3.8	3.8
rds_ ity_ m	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
rds_	1.9	1.9	1.9	1.9	1.9	1.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
refi (cor spi)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
SEG	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	NA	NA	NA	NA
sslir	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
tabl	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
TCN	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	NA	NA	NA	NA
tds_	2.0.	2.0.	2.0.	2.0.	2.0.	2.0.	2.0.	2.0.	2.0.	2.0.	2.0.	2.0.	2.0.	2.0.	2.0.	2.0.	2.0.	2.0.2
tsm m_r	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
tsm m_t	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
una	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
uuic ossp	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
wal	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.5	2.5	2.5	2.5	2.4	2.4	2.4	2.4	2.4	2.4

Extensions supported for Aurora PostgreSQL 13

The following table shows the PostgreSQL extension versions that are currently supported on Aurora PostgreSQL 13 versions. "NA" indicates that the extension isn't available for that PostgreSQL version. For more information about PostgreSQL extensions, see Packaging Related Objects into an Extension in the PostgreSQL documentation.

Exte	13.2	13.2	13.2	13.2	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.9	13.8	13.7	13.6	13.5	13.4
add tanc er	3.5.	3.5.	3.5.	3.5.	3.4.	3.4.	3.4.	3.4.	3.4.	3.3.	3.3.	3.3.	3.2.	3.2.	3.1.	3.1.	3.1.	3.1.7
add tanc er_c s	3.5.	3.5.	3.5.	3.5.	3.4.	3.4.	3.4.	3.4.	3.4.	3.3.	3.3.	3.3.	3.2.	3.2.	3.1.	3.1.	3.1.	3.1.7
amc	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
apg mgr	2.9	2.9	2.9	2.8	2.7	2.7	2.7	2.6	2.6	2.5	2.4	2.4	2.4	2.3	2.2	2.2	2.2	2.2
aurc at_u	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
autc (cor spi)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
autc ain	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
aws ns	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
aws a	2.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Exte	13.2	13.2	13.2	13.2	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.9	13.8	13.7	13.6	13.5	13.4
aws	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
aws	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
bloc	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
boo rl	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
btre	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
btre t	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
cite	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
cub	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
dbli	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
dict	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
dict	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
eart anc	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
fuzz atch	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
h3-pg	4.2.	4.1.	4.1.	4.1.	4.1.	4.1.	4.1.	4.1.	4.1.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
h3-post s	4.1.	4.1.	4.1.	4.1.	4.1.	4.1.	4.1.	4.1.	4.1.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
hll	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2

Exte	13.2	13.2	13.2	13.2	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.9	13.8	13.7	13.6	13.5	13.4
hstc	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
hstc perl	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.0	1.0
hyp	1.4.	1.4.	1.4.	1.4.	1.4.	1.4.	1.4.	1.4.	1.4.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
inse erna (cor spi)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
inta	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
inta	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
ip4r	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
isn	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
json erl	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
lo	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	NA	NA	NA
log_	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
ltree	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
moc me (cor spi)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
mys	2.9.	2.9.	2.9.	2.9.	2.9.	2.9.	2.9.	2.9.	2.9.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Exte	13.2	13.2	13.2	13.2	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.9	13.8	13.7	13.6	13.5	13.4
orac w	2.8.	2.8.	2.7.	2.7.	2.6.	2.6.	2.6.	2.6.	2.6.	2.5.	2.5.	2.5.	2.3.	2.3.	2.3.	2.3.	2.3.	2.3.0
oraf	4.14	4.14	4.14	4.14	4.12	4.10	4.9.	4.6.	4.6.	4.3.	4.0.	4.0.	3.2	3.2	3.2	3.2	3.2	3.2
pg_	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
pg_ cach	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
pg_	1.6.	1.6.	1.6.	1.6.	1.6.	1.6.	1.6.	1.6.	1.6.	1.5	1.5	1.4.	1.4	1.4	1.4	1.4	1.4	1.3
pg_ acer	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
pg_ lan	1.3.	1.3.	1.3.	1.3.	1.3.	1.3.	1.3.	1.3.	1.3.	1.3.	1.3.	1.3.	1.3.	1.3.	1.3.	1.3.	1.3.	1.3.7
pg_ n	4.7.	4.7.	4.7.	4.7.	4.7.	4.7.	4.7.	4.7.	4.7.	4.7.	4.7.	4.5.	4.5.	4.5.	4.5.	4.5.	4.5.	4.5.1
pg_ m	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
pg_ b	0.0.	0.0.	0.0.	0.0.	0.0.	0.0.	0.0.	0.0.	0.0.	0.0.	0.0.	0.0.	0.0.	0.0.	0.0.	0.0.	0.0.	0.0.9
pg_	1.5.	1.5.	1.5.	1.5.	1.5.	1.5.	1.5.	1.4.	1.4.	1.4.	1.4.	1.4.	1.4.	1.4.	1.4.	1.4.	1.4.	1.4.6
pg_ rity	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
pg_ tate	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
pg_	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5

Exte	13.2	13.2	13.2	13.2	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.9	13.8	13.7	13.6	13.5	13.4
pg_lity	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
pgA	1.5.	1.5.	1.5.	1.5.	1.5.	1.5.	1.5.	1.5.	1.5.	1.5.	1.5.	1.5.	1.5.	1.5.	1.5.	1.5.	1.5	1.5
pgc	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
pglc	2.4.	2.4.	2.4.	2.4.	2.4.	2.4.	2.4.	2.4.	2.4.	2.4.	2.4.	2.4.	2.4.	2.4.	2.4.	2.4.	2.4.	2.4.0
pglc_ori	1.0.	1.0.	1.0.	1.0.	1.0.	1.0.	1.0.	1.0.	1.0.	1.0.	1.0.	1.0.	1.0.	1.0.	1.0.	1.0.	1.0.	1.0.0
pgr	3.6.	3.6.	3.6.	3.6.	3.6.	3.6.	3.6.	3.4.	3.4.	3.4.	3.4.	3.4.	3.1.	3.1.	3.1.	3.1.	3.1.	3.1.0
pgrs	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
pgstle	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
pgta	1.3.	1.3.	1.3.	1.3.	1.3.	1.3.	1.3.	1.1.	1.1.	1.1.	1.1.	1.1.	1.1.	1.1.	1.1.	1.1.	1.1.	1.1.0
pgv	0.8.	0.8.	0.8.	0.8.	0.7.	0.7.	0.7.	0.5.	0.5.	0.5.	0.4.	N/A	N/A	N/A	N/A	N/A	N/A	N/A
plcc	3.1.	3.1.	3.1.	3.1.	3.1.	3.1.	3.1.	3.1.	3.1.	3.1.	3.1.	3.1.	3.0.	3.0.	2.3.	2.3.	2.3.	2.3.15
plls	3.1.	3.1.	3.1.	3.1.	3.1.	3.1.	3.1.	3.1.	3.1.	3.1.	3.1.	3.1.	3.0.	3.0.	2.3.	2.3.	2.3.	2.3.15
plpe	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
plpc	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
plpr	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
pltc	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
plv8	3.1.	3.1.	3.1.	3.1.	3.1.	3.1.	3.1.	3.1.	3.1.	3.1.	3.1.	3.1.	3.0.	3.0.	2.3.	2.3.	2.3.	2.3.15

Exte	13.2	13.2	13.2	13.2	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.9	13.8	13.7	13.6	13.5	13.4
Post	3.5.	3.5.	3.5.	3.5.	3.4.	3.4.	3.4.	3.4.	3.4.	3.3.	3.3.	3.3.	3.2.	3.2.	3.1.	3.1.	3.1.	3.1.7
post aste	3.5.	3.5.	3.5.	3.5.	3.4.	3.4.	3.4.	3.4.	3.4.	3.3.	3.3.	3.3.	3.2.	3.2.	3.1.	3.1.	3.1.	3.1.7
post iger ode	3.5.	3.5.	3.5.	3.5.	3.4.	3.4.	3.4.	3.4.	3.4.	3.3.	3.3.	3.3.	3.2.	3.2.	3.1.	3.1.	3.1.	3.1.7
post opo	3.5.	3.5.	3.5.	3.5.	3.4.	3.4.	3.4.	3.4.	3.4.	3.3.	3.3.	3.3.	3.2.	3.2.	3.1.	3.1.	3.1.	3.1.7
post fdw	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
pref	1.2.	1.2.	1.2.	1.2.	1.2.	1.2.	1.2.	1.2.	1.2.	1.2.	1.2.	1.2.	1.2.	1.2.	1.2.	1.2.	1.2.	1.2.8
rdki	4.6. (202 6)	4.6. (202 6)	4.6. (202 6)	4.6. (Rel 202)	4.6. (Rel 202)	4.5. (Rel 202)	4.4. (Rel 202)	4.4. (Rel 202)	4.4. (Rel 202)	4.3	4.2	4.2	4.2	3.8	3.8	3.8	3.8	3.8
rds_ ity_ m	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.3	1.3	1.3
rds_	1.9	1.9	1.9	1.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
refi (cor spi)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
SEG	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	NA	NA	NA	NA	NA	NA
sslir	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
tabl	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Exte	13.2	13.2	13.2	13.2	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.9	13.8	13.7	13.6	13.5	13.4
TCN	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	NA	NA	NA	NA	NA	NA
tds_	2.0.	2.0.	2.0.	2.0.	2.0.	2.0.	2.0.	2.0.	2.0.	2.0.	2.0.	2.0.	2.0.	2.0.	2.0.	2.0.	N/A	N/A
tsm_r	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
tsm_t	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
una	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
uuic ossp	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
wal	2.6	2.6	2.6	2.6	2.6	2.6	2.5	2.5	2.5	2.4	2.4	2.4	2.4	2.4	2.4	2.3	2.3	2.3

Extensions supported for Aurora PostgreSQL 12

The following table shows the PostgreSQL extension versions that are currently supported on Aurora PostgreSQL 12 versions. "NA" indicates that the extension isn't available for that PostgreSQL version. For more information about PostgreSQL extensions, see Packaging Related Objects into an Extension in the PostgreSQL documentation.

Exter	12.22	12.20	12.19	12.18	12.17	12.16	12.15	12.14	12.13	12.12	12.11	12.10	12.9	12.8
addre tanda er	3.4.0	3.4.0	3.4.0	3.4.0	3.4.0	3.3.3	3.3.2	3.3.2	3.2.3	3.2.3	3.1.7	3.1.7	3.1.7	3.1
addre tanda er_da s	3.4.0	3.4.0	3.4.0	3.4.0	3.4.0	3.3.3	3.3.2	3.3.2	3.2.3	3.2.3	3.1.7	3.1.7	3.1.7	3.1

Exter	12.22	12.20	12.19	12.18	12.17	12.16	12.15	12.14	12.13	12.12	12.11	12.10	12.9	12.8
amch	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
apg_ mgm	2.7	2.7	2.7	2.6	2.6	2.5	2.4	2.4	2.4	2.3	2.2	2.2	2.2	2.2
auror at_ut	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
auto_ ain	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
aws_ ns	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
aws_ a	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
aws_	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
aws_	1.2	1.2	1.2	1.2	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
bloor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
btree	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
btree t	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
citext	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
cube	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
dblin	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
dict_i	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
dict_	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Exter	12.22	12.20	12.19	12.18	12.17	12.16	12.15	12.14	12.13	12.12	12.11	12.10	12.9	12.8
earthdistance	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
fuzzystrmatch	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
hll	2.17	2.17	2.17	2.17	2.17	2.17	2.17	2.17	2.14	2.14	2.14	2.14	2.14	2.14
hstore	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
hstore_perl	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
intagg	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
intarray	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
ip4r	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
isn	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
jsonb_perl	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
lo	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	NA	NA	NA
log_fdw	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
ltree	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
mysql_fdw	2.9.2	2.9.2	2.9.1	2.9.1	2.9.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
oracle_fdw	2.6.0	2.6.0	2.6.0	2.6.0	2.6.0	2.5.0	2.5.0	2.5.0	2.3.0	2.3.0	2.3.0	2.3.0	2.3.0	2.3.0
orafce	4.12.0	4.10.1	4.9.4	4.6.0	4.6.0	4.3.0	4.0.0	4.0.0	3.16	3.16	3.16	3.16	3.16	3.16
pg_bigm	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2

Exter	12.22	12.20	12.19	12.18	12.17	12.16	12.15	12.14	12.13	12.12	12.11	12.10	12.9	12.8
pg_bu cache	pg_bu cache	pg_bu cache	pg_bu cache	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
pg_cr	1.6.4	1.6.3	1.6.2	1.6.0	1.6.0	1.5	1.5	1.4.2	1.4.1	1.4.1	1.4.1	1.4.1	1.4.1	1.3.1
pg_fr acem	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
pg_hi lan	1.3.1(	1.3.9	1.3.9	1.3.9	1.3.9	1.3.8	1.3.8	1.3.8	1.3.7	1.3.7	1.3.7	1.3.7	1.3.5	1.3.5
pg_p n	4.7.4	4.7.4	4.7.4	4.7.3	4.7.3	4.7.3	4.7.3	4.5.1	4.5.1	4.5.1	4.5.1	4.5.1	4.5.1	4.5.1
pg_pr m	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
pg_pr b	0.0.1(	0.0.1(	0.0.1(	0.0.1(	0.0.1(	0.0.9	0.0.9	0.0.9	0.0.9	0.0.9	0.0.9	0.0.9	0.0.9	0.0.9
pg_re	1.5.0	1.5.0	1.5.0	1.4.7	1.4.7	1.4.7	1.4.7	1.4.7	1.4.5	1.4.5	1.4.5	1.4.5	1.4.5	1.4.5
pg_si rity	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
pg_st tatem	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
pg_tr	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4			
pg_vi lity	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
pgAu	1.4.2	1.4.2	1.4.2	1.4.2	1.4.2	1.4.2	1.4.2	1.4.2	1.4.2	1.4.2	1.4.2	1.4	1.4	1.4
pgcry	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
pgloc	2.4.3	2.4.3	2.4.3	2.4.3	2.4.3	2.4.3	2.4.2	2.4.2	2.4.1	2.4.1	2.4.0	2.4.0	2.4.0	2.3.2

Exter	12.22	12.20	12.19	12.18	12.17	12.16	12.15	12.14	12.13	12.12	12.11	12.10	12.9	12.8
pgloc _origi	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0
pgrou	3.6.2	3.6.2	3.6.2	3.4.1	3.4.1	3.4.1	3.4.1	3.4.1	3.0.3	3.0.3	3.0.3	3.0.3	3.0.3	3.0.3
pgrov s	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
pgsta le	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
pgTA	1.3.3	1.3.3	1.3.2	1.1.0	1.1.0	1.1.0	1.1.0	1.1.0	1.1.0	1.1.0	1.1.0	1.1.0	1.1.0	1.1.0
pgve	0.7.4	0.7.3	0.7.0	0.5.1	0.5.1	0.5.0	0.4.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
plcofi	3.1.8	3.1.8	3.1.8	3.1.8	3.1.8	3.1.6	2.3.1	2.3.1	2.3.1	2.3.1	2.3.1	2.3.1	2.3.1	2.3.14
plls	3.1.8	3.1.8	3.1.8	3.1.8	3.1.8	3.1.6	2.3.1	2.3.1	2.3.1	2.3.1	2.3.1	2.3.1	2.3.1	2.3.14
plper	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.0	1.0	1.0	1.0
plpgs	plpgs	plpgs	plpgs	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
plpro r	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
pltcl	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
plv8	3.1.1	3.1.1	3.1.1	3.1.1	3.1.8	3.1.6	2.3.1	2.3.1	2.3.1	2.3.1	2.3.1	2.3.1	2.3.1	2.3.14
PostG	3.4.3	3.4.2	3.4.2	3.4.0	3.4.0	3.3.3	3.3.2	3.3.2	3.2.3	3.2.3	3.1.7	3.1.7	3.1.7	3.1
postg aster	3.4.2	3.4.2	3.4.2	3.4.0	3.4.0	3.3.3	3.3.2	3.3.2	3.2.3	3.2.3	3.1.7	3.1.7	3.1.7	3.1
postg iger_ oder	3.4.2	3.4.2	3.4.2	3.4.0	3.4.0	3.3.3	3.3.2	3.3.2	3.2.3	3.2.3	3.1.7	3.1.7	3.1.7	3.1

Exter	12.22	12.20	12.19	12.18	12.17	12.16	12.15	12.14	12.13	12.12	12.11	12.10	12.9	12.8
postg opolo	3.4.2	3.4.2	3.4.2	3.4.0	3.4.0	3.3.3	3.3.2	3.3.2	3.2.3	3.2.3	3.1.7	3.1.7	3.1.7	3.1
postg fdw	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
prefix	1.2.1(	1.2.1(	1.2.1(	1.2.1(	1.2.1(	1.2.8	1.2.8	1.2.8	1.2.8	1.2.8	1.2.8	1.2.8	1.2.8	1.2.8
rdkit	4.6.0 (Relea 2024)	4.5.0 (Relea 2024)	4.4.0 (Relea 2024)	4.4.0 (Relea 2023)	4.4.0 (Relea 2023)	4.3	4.2	4.2	4.2	3.8	3.8	3.8	3.8	3.8
rds_a ity_st m	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
SEG	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	NA	NA	NA	NA	NA	NA
sslinf	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
table	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
TCN	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	NA	NA	NA	NA	NA	NA
tds_f	2.0.3	2.0.3	2.0.3	2.0.3	2.0.3	2.0.3	2.0.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
tsm_s m_ro	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
tsm_s m_tir	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
unacc	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
uuid-ossp	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1

Exter	12.22	12.20	12.19	12.18	12.17	12.16	12.15	12.14	12.13	12.12	12.11	12.10	12.9	12.8
wal2j	2.6	2.6	2.5	2.5	2.5	2.5	2.5	2.5	2.4	2.4	2.4	2.3	2.3	2.3

Extensions supported for Aurora PostgreSQL 11

The following table shows PostgreSQL extension versions currently supported on Aurora PostgreSQL 11 versions. "NA" indicates that the extension isn't available for that PostgreSQL version. For more information about PostgreSQL extensions, see Packaging Related Objects into an Extension.

Extension	11.21	11.20	11.19	11.18	11.17	11.16	11.15	11.14	11.13
address_standardizer	3.3.3	3.3.2	3.3.2	3.2.3	3.2.3	3.1.7	3.1.7	3.1.7	3.1
address_standardizer_data_us	3.3.3	3.3.2	3.3.2	3.2.3	3.2.3	3.1.7	3.1.7	3.1.7	3.1
amcheck	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
apg_plan_mgmt	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
aurora_stat_utils	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
auto_explain	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
aws_commons	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
aws_lambda	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
aws_ml	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
aws_s3	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
bloom	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Extension	11.21	11.20	11.19	11.18	11.17	11.16	11.15	11.14	11.13
btree_gin	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
btree_gist	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
citext	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
cube	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
dblink	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
dict_int	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
dict_xsyn	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
earthdistance	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
fuzzystrmatch	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
hll	2.17	2.17	2.17	2.11	2.11	2.11	2.11	2.11	2.11
hstore	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
hstore_plperl	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
intagg	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
intarray	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
ip4r	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
isn	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
jsonb_plperl	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
lo	1.1	1.1	1.1	1.1	1.1	1.1	NA	NA	NA
log_fdw	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
ltree	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1

Extension	11.21	11.20	11.19	11.18	11.17	11.16	11.15	11.14	11.13
orafce	4.3.0	4.0.0	4.0.0	3.16	3.16	3.16	3.16	3.16	3.16
pg_bigm	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
pg_buffercache	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
pg_freespacemap	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
pg_hint_plan	1.3.8	1.3.8	1.3.8	1.3.7	1.3.7	1.3.7	1.3.7	1.3.7	1.3.5
pg_prewarm	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
pg_proctab	0.0.9	0.0.9	0.0.9	0.0.9	0.0.9	0.0.9	0.0.9	0.0.9	0.0.9
pg_repack	1.4.6	1.4.6	1.4.6	1.4.4	1.4.4	1.4.4	1.4.4	1.4.4	1.4.4
pg_similarity	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
pg_stat_statements	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
pg_trgm	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
pg_visibility	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
pgAudit	1.3.3	1.3.3	1.3.3	1.3.3	1.3.3	1.3.3	1.3.3	1.3.1	1.3.1
pgcrypto	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
pglogical	2.4.3	2.4.2	2.4.2	2.4.1	2.4.1	2.4.1	2.4.0	2.4.0	2.4.0
pglogical_origin	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0
pgrouting	3.4.1	3.4.1	3.4.1	2.6.3	2.6.3	2.6.3	2.6.3	2.6.3	2.6.3
pgrowlocks	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2

Extension	11.21	11.20	11.19	11.18	11.17	11.16	11.15	11.14	11.13
pgstattuple	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
pgTAP	1.1.0	1.1.0	1.1.0	1.1.0	1.1.0	1.1.0	1.1.0	1.1.0	1.1.0
plcoffee	3.1.6	2.3.15	2.3.15	2.3.15	2.3.15	2.3.15	2.3.14	2.3.14	2.3.14
plls	3.1.6	2.3.15	2.3.15	2.3.15	2.3.15	2.3.15	2.3.14	2.3.14	2.3.14
plperl	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
plpgsql	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
plprofiler	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
pltcl	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
plv8	3.1.6	2.3.15	2.3.15	2.3.15	2.3.15	2.3.15	2.3.14	2.3.14	2.3.14
PostGIS	3.3.3	3.3.2	3.3.2	3.2.3	3.2.3	3.1.7	3.1.7	3.1.7	3.1
postgis_tiger_geocoder	3.3.3	3.3.2	3.3.2	3.2.3	3.2.3	3.1.7	3.1.7	3.1.7	3.1
postgis_topology	3.3.3	3.3.2	3.3.2	3.2.3	3.2.3	3.1.7	3.1.7	3.1.7	3.1
postgres_fdw	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
prefix	1.2.8	1.2.8	1.2.8	1.2.8	1.2.8	1.2.8	1.2.8	1.2.8	1.2.8
rdkit	4.3	4.2	4.2	4.2	3.8	3.8	3.8	3.8	3.8
rds_activity_stream	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
SEG	1.0	1.0	1.0	NA	NA	NA	NA	NA	NA
sslinfo	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
tablefunc	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Extension	11.21	11.20	11.19	11.18	11.17	11.16	11.15	11.14	11.13
TCN	1.0	1.0	1.0	NA	NA	NA	NA	NA	NA
tsm_system_rows	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
tsm_system_time	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
unaccent	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
uuid-ossp	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
wal2json	2.5	2.5	2.5	2.4	2.4	2.4	2.3	2.3	2.3

Extensions supported for Aurora PostgreSQL 10

The following table shows PostgreSQL extension versions currently supported on Aurora PostgreSQL 10 versions. "NA" indicates that the extension isn't available for that PostgreSQL version. For more information about PostgreSQL extensions, see Packaging Related Objects into an Extension.

Note

- The `adminpack` extension is no longer supported because it accesses the file system.
- The `plperlu` extension is no longer supported because it is an untrusted language extension.
- The `pltclu` extension is no longer supported because it is an untrusted language extension.

Extension	10.2	10.2	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.7	10.6	10.5	10.4
address_standardizer	3.1.7	3.1.7	3.1.7	3.1	2.4.7	2.4.4	2.4.4	2.4.4	2.4.4	2.4.4	2.4.4	2.4.4	2.4.4	2.4.4

Extension	10.2	10.2	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.7	10.6	10.5	10.4
address_standardizer_data_us	3.1.7	3.1.7	3.1.7	3.1	2.4.7	2.4.4	2.4.4	2.4.4	2.4.4	2.4.4	2.4.4	2.4.4	2.4.4	2.4.4
adminpack	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1	1.1	1.1
amcheck	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
apg_plan_mgmt	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.0.1	1.0.1	1.0.1	0.1
aurora_stat_utils	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
auto_explain	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
aws_commons	1.2	1.2	1.2	1.2	1.2	1.2	1.1	1.1	1.1	1.1	1.0	1.0	NA	NA
aws_ml	1.0	1.0	1.0	1.0	1.0	1.0	1.0	NA	NA	NA	NA	NA	NA	NA
aws_s3	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.0	1.0	NA	NA
bloom	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
btree_gin	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
btree_gist	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
chkpass	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
citext	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
cube	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
dblink	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
dict_int	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
dict_xsyn	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Extension	10.2	10.2	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.7	10.6	10.5	10.4
earthdistance	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
fuzzystrmatch	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
hll	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10
hstore	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
hstore_plperl	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
hstore_plperlu	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
intagg	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
intarray	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
ip4r	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
isn	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
lo	1.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
log_fdw	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
ltree	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
orafce	3.16	3.16	3.16	3.16	3.16	3.8	3.8	3.8	3.8	3.6	3.6	3.6	3.6	3.6
pg_buffercache	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
pg_freespacemap	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
pg_hint_plan	1.3.6	1.3.6	1.3.6	1.3.5	1.3.5	1.3.5	1.3.5	1.3.5	1.3.3	1.3.3	1.3.1	1.3.1	1.3.1	1.3.0
pg_prewarm	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
pg_repack	1.4.3	1.4.3	1.4.3	1.4.3	1.4.3	1.4.3	1.4.3	1.4.3	1.4.3	1.4.3	1.4.3	1.4.3	1.4.3	1.4.3

Extension	10.2	10.2	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.7	10.6	10.5	10.4
pg_similarity	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	NA
pg_stat_statements	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.5	1.5
pg_trgm	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
pg_visibility	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
pgAudit	1.2.3	1.2.3	1.2.1	1.2.1	1.2.1	1.2.1	1.2.1	1.2.1	1.2	1.2	1.2	1.2	1.2	1.2
pgcrypto	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
pglogical	2.4.1	2.4.0	2.4.0	2.4.0	2.2.2	2.2.2	2.2.2	2.2.2	NA	NA	NA	NA	NA	NA
pglogical_origin	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	NA	NA	NA	NA	NA	NA
pgrouting	2.5.2	2.5.2	2.5.2	2.5.2	2.5.2	2.5.2	2.5.2	2.5.2	2.5.2	2.5.2	2.5.2	2.5.2	2.5.2	2.5.2
pgrowlocks	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
pgstattuple	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
plcoffee	2.3.1	2.3.1	2.3.1	2.3.1	2.3.1	2.3.1	2.3.1	2.3.1	2.1.2	2.1.2	2.1.2	2.1.2	2.1.2	2.1.2
plls	2.3.1	2.3.1	2.3.1	2.3.1	2.3.1	2.3.1	2.3.1	2.3.1	2.1.2	2.1.2	2.1.2	2.1.2	2.1.2	2.1.2
plperl	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
plperlu	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0	1.0	1.0
plpgsql	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
plprofiler	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	NA	NA	NA	NA
pltcl	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
pltclu	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0	1.0	1.0

Extension	10.2	10.2	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.7	10.6	10.5	10.4
plv8	2.3.1	2.3.1	2.3.1	2.3.1	2.3.1	2.3.1	2.3.1	2.3.1	2.1.2	2.1.2	2.1.2	2.1.2	2.1.2	2.1.2
PostGIS	3.1.7	3.1.7	3.1.7	3.1	2.4.7	2.4.4	2.4.4	2.4.4	2.4.4	2.4.4	2.4.4	2.4.4	2.4.4	2.4.4
postgis_tiger_geocoder	3.1.7	3.1.7	3.1.7	3.1	2.4.7	2.4.4	2.4.4	2.4.4	2.4.4	2.4.4	2.4.4	2.4.4	2.4.4	2.4.4
postgis_topology	3.1.7	3.1.7	3.1.7	3.1	2.4.7	2.4.4	2.4.4	2.4.4	2.4.4	2.4.4	2.4.4	2.4.4	2.4.4	2.4.4
postgres_fdw	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
prefix	1.2.8	1.2.8	1.2.8	1.2.8	1.2.8	1.2.8	1.2.8	1.2.8	1.2.8	1.2.8	1.2.8	1.2.8	1.2.8	1.2.8
rdkit	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	NA	NA	NA	NA	NA	NA
rds_activity_stream	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	NA
sslinfo	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
tablefunc	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
tsearch2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
tsm_system_rows	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
tsm_system_time	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
unaccent	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
uuid-ossp	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
wal2json	2.4	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.1	2.1	NA	NA	NA

Extensions supported for Aurora PostgreSQL 9.6

The following table shows PostgreSQL extension versions supported on Aurora PostgreSQL 9.6 versions. "NA" indicates that the extension isn't available for that PostgreSQL version. For more information about PostgreSQL extensions, see Packaging Related Objects into an Extension.

Note

- The `apgcc` RDS for PostgreSQL internal extension is no longer supported.
- The `apgunit` RDS for PostgreSQL internal extension is no longer supported.
- The `pageinspect` extension is no longer publicly supported by RDS for PostgreSQL.
- The `xml2` extension is no longer supported by PostgreSQL.

Extension	9.6.2	9.6.2	9.6.1	9.6.1	9.6.1	9.6.1	9.6.1	9.6.1	9.6.0	9.6.8	9.6.6	9.6.3
address_standardizer	2.3.9	2.3.7	2.3.7	2.3.7	2.3.7	2.3.7	2.3.7	2.3.7	2.3.7	2.3.4	2.3.4	2.3.4
address_standardizer_data_us	2.3.9	2.3.7	2.3.7	2.3.7	2.3.7	2.3.7	2.3.7	2.3.7	2.3.7	2.3.4	2.3.4	2.3.4
apg_plan_mgmt	1.0.1	1.0.1	2.0	2.0	2.0	2.0	2.0	2.0	NA	NA	NA	0.1
apgcc	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0	1.0
apgunit	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0	1.0
aurora_stat_utils	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
auto_explain	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
bloom	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
btree_gin	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
btree_gist	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
chkpass	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Extension	9.6.2	9.6.2	9.6.1	9.6.1	9.6.1	9.6.1	9.6.1	9.6.1	9.6.0	9.6.8	9.6.6	9.6.3
citext	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
cube	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
dblink	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
dict_int	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
dict_xsyn	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
earthdistance	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
fuzzystrmatch	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
hll	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	NA
hstore	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
hstore_plperl	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
intagg	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
intarray	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
ip4r	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0
isn	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
log_fdw	1.0	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
ltree	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
orafce	3.6	3.6	3.6	3.6	3.6	3.6	3.8	3.8	3.8	3.8	3.16	NA
pageinspect	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5	1.5
pg_buffercache	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
pg_freespacemap	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1

Extension	9.6.2	9.6.2	9.6.1	9.6.1	9.6.1	9.6.1	9.6.1	9.6.1	9.6.0	9.6.8	9.6.6	9.6.3
pg_hint_plan	1.2.2	1.2.2	1.2.3	1.2.3	1.2.5	1.2.5	1.2.6	1.2.6	1.2.6	1.2.6	1.1.3	1.1.3
pg_prewarm	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
pg_repack	1.4.3	1.4.3	1.4.3	1.4.3	1.4.3	1.4.3	1.4.3	1.4.3	1.4.3	1.4.2	1.4.2	1.4.0
pg_similarity	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	NA	NA	NA	NA
pg_stat_statements	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
pg_trgm	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
pg_visibility	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
pgAudit	1.1.1	1.1.1	1.1.1	1.1.1	1.1.1	1.1.1	1.1.2	1.1.2	1.1.2	1.0	1.0	1.0
pgcrypto	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
pgrouting	2.4.2	2.4.2	2.4.2	2.4.2	2.4.2	2.4.2	2.4.2	2.4.2	2.4.2	2.4.2	2.4.2	2.4.2
pgrowlocks	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
pgstattuple	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
plcoffee	2.3.1	2.3.1	2.3.1	2.3.1	2.1.2	2.1.2	2.1.2	2.1.2	2.1.2	2.1.0	1.5.3	1.5.3
plls	2.3.1	2.3.1	2.3.1	2.3.1	2.1.2	2.1.2	2.1.2	2.1.2	2.1.2	2.1.0	1.5.3	1.5.3
plperl	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
plpgsql	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
pltcl	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
plv8	2.3.1	2.3.1	2.3.1	2.3.1	2.1.2	2.1.2	2.1.2	2.1.2	2.1.2	2.1.0	1.5.3	1.5.3
PostGIS	2.3.9	2.3.7	2.3.7	2.3.7	2.3.7	2.3.7	2.3.7	2.3.7	2.3.7	2.3.4	2.3.4	2.3.4
postgis_tiger_geocoder	2.3.9	2.3.7	2.3.7	2.3.7	2.3.7	2.3.7	2.3.7	2.3.7	2.3.7	2.3.4	2.3.4	2.3.4

Extension	9.6.2	9.6.2	9.6.1	9.6.1	9.6.1	9.6.1	9.6.1	9.6.1	9.6.0	9.6.8	9.6.6	9.6.3
postgis_topology	2.3.9	2.3.7	2.3.7	2.3.7	2.3.7	2.3.7	2.3.7	2.3.7	2.3.7	2.3.4	2.3.4	2.3.4
postgres_fdw	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
prefix	1.2.0	1.2.0	1.2.0	1.2.0	1.2.0	1.2.0	1.2.0	1.2.0	1.2.0	1.2.0	1.2.0	NA
sslinfo	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
tablefunc	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
tsearch2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
tsm_system_rows	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
tsm_system_time	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
unaccent	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
uuid-ossp	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
xml2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1	1.1

Document history for the Aurora PostgreSQL Release Notes

The following table describes Aurora PostgreSQL releases.

Change	Description	Date
Aurora PostgreSQL Limitless Database patch releases 16.9.102	Amazon Aurora PostgreSQL Limitless Database releases Aurora PostgreSQL Limitless Database 16.9.102, compatible with PostgreSQL 16.9	November 21, 2025
Aurora PostgreSQL Limitless Database patch releases 16.9.101	Amazon Aurora PostgreSQL Limitless Database releases Aurora PostgreSQL Limitless Database 16.9.101, compatible with PostgreSQL 16.9	November 6, 2025
Aurora PostgreSQL Limitless Database patch releases 16.8.102, 16.6.103, and 16.4.106	Amazon Aurora PostgreSQL Limitless Database releases Aurora PostgreSQL Limitless Database 16.8.102, Aurora PostgreSQL Limitless Database 16.6.103, and Aurora PostgreSQL Limitless Database 16.4.106, compatible with PostgreSQL 16.8, 16.6, and 16.4.	October 13, 2025
Aurora PostgreSQL patch releases 17.4.4, 16.8.4, 15.12.4, 14.17.4, and 13.20.4	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 17.4.4, Aurora PostgreSQL 16.8.4, Aurora PostgreSQL 15.12.4, Aurora PostgreSQL 14.17.4,	October 9, 2025

	and Aurora PostgreSQL 13.20.4. compatible with PostgreSQL 17.4, 16.8, 15.12, 14.17, and 13.20.	
Aurora PostgreSQL patch releases 17.5.3, 16.9.3, 15.13.3, 14.18.3, and 13.21.3	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 17.5.3, Aurora PostgreSQL 16.9.3, Aurora PostgreSQL 15.13.3, Aurora PostgreSQL 14.18.3, and Aurora PostgreSQL 13.21.3. compatible with PostgreSQL 17.5, 16.9, 15.13, 14.18, and 13.21.	September 17, 2025
Aurora PostgreSQL patch releases 17.5.2, 16.9.2, 15.13.2, 14.18.2, and 13.21.2	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 17.5.2, Aurora PostgreSQL 16.9.2, Aurora PostgreSQL 15.13.2, Aurora PostgreSQL 14.18.2, and Aurora PostgreSQL 13.21.2. compatible with PostgreSQL 17.5, 16.9, 15.13, 14.18, and 13.16.	August 8, 2025
Aurora PostgreSQL patch releases 16.3.5, 15.7.5, 14.12.5, and 13.15.5	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 16.3.5, Aurora PostgreSQL 15.7.5, Aurora PostgreSQL 14.12.5, and Aurora PostgreSQL 13.15.5 compatible with PostgreSQL 16.3, 15.7, 14.12, and 13.15.	July 17, 2025

Aurora PostgreSQL patch releases 16.4.5, 15.8.5, 14.13.5, and 13.16.5	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 16.4.5, Aurora PostgreSQL 15.8.5, Aurora PostgreSQL 14.13.5, and Aurora PostgreSQL 13.16.5 compatible with PostgreSQL 16.4, 15.8, 14.13, and 13.16.	July 11, 2025
Aurora PostgreSQL releases versions 17.5, 16.9, 15.13, 14.18, and 13.21	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 17.5, Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 16.9, Aurora PostgreSQL 15.13, Aurora PostgreSQL 14.18, and Aurora PostgreSQL 13.21, including Babelfish 5.2.0, Babelfish 4.6.0, Babelfish 3.10.0, Babelfish 2.13.0, apg_plan_mgmt version 2.9 for Aurora PostgreSQL 17.5, apg_plan_mgmt version 2.9 for Aurora PostgreSQL 16.9, apg_plan_mgmt version 2.9 for Aurora PostgreSQL 15.13, apg_plan_mgmt version 2.9 for Aurora PostgreSQL 14.18, apg_plan_mgmt version 2.9 for Aurora PostgreSQL 13.21, compatible with PostgreSQL 16.9, 15.13, 14.18, and 13.21.	June 30, 2025

Aurora PostgreSQL patch releases 17.4.3, 16.8.3, 15.12.3 ,14.17.3, and 13.20.3	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 17.4.3, Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 16.8.3, Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 15.12.3, Aurora PostgreSQL 14.17.3, and Aurora PostgreSQL 13.20.3, including Babelfish 5.1.1, Babelfish 4.5.1, Babelfish 3.9.1, Babelfish 2.12.1, compatible with PostgreSQL 17.4, 16.8, 15.12, 14.17, and 13.20.	June 3, 2025
Aurora PostgreSQL patch releases 15.4.10 ,14.9.10, 13.12.10, and 11.21.10	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 15.4.10, Aurora PostgreSQL 14.9.10, Aurora PostgreSQL 13.12.10, and Aurora PostgreSQL 11.21.10 compatible with PostgreSQL 15.4, 14.9, 13.12, and 11.21.	May 7, 2025
Aurora PostgreSQL releases versions 17.4	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 17.4 including Babelfish 5.1.0, apg_plan_mgmt version 2.8 for Aurora PostgreSQL 17.4 compatible with PostgreSQL 17.4.	May 1, 2025

Aurora PostgreSQL patch releases 17.4.2	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 17.4.2 compatible with PostgreSQL 17.4.	May 1, 2025
Aurora PostgreSQL patch releases 15.3.9 ,14.8.9, and 13.11.9	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 15.3.9, Aurora PostgreSQL 14.8.9, and Aurora PostgreSQL 13.11.9, compatible with PostgreSQL 15.3, 14.8, and 13.11.	April 30, 2025
Aurora PostgreSQL patch releases 14.6.12, and 13.9.12	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 14.6.12, and Aurora PostgreSQL 13.9.12, compatible with PostgreSQL 14.6, and 13.9.	April 29, 2025
Aurora PostgreSQL patch releases 12.9.15	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 12.9.15 compatible with PostgreSQL 12.9.	April 29, 2025
Aurora PostgreSQL patch releases 11.9.15	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 11.9.15 compatible with PostgreSQL 11.9.	April 29, 2025

Aurora PostgreSQL patch releases 16.1.7, 15.5.7, 14.10.7, and 13.13.7	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 16.1.7, Aurora PostgreSQL 15.5.7, Aurora PostgreSQL 14.10.7, and Aurora PostgreSQL 13.13.7, compatible with PostgreSQL 16.1, 15.5, 14.10, and 13.13.	April 22, 2025
Aurora PostgreSQL patch releases 16.4.4, 15.8.4, 14.13.4, and 13.16.4	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 16.4.4, Aurora PostgreSQL 15.8.4, Aurora PostgreSQL 14.13.4, and Aurora PostgreSQL 13.16.4, compatible with PostgreSQL 16.4, 15.8, 14.13, and 13.16.	April 17, 2025
Aurora PostgreSQL patch releases 16.2.5, 15.6.5, 14.11.5, and 13.14.5	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 16.2.5, Aurora PostgreSQL 15.6.5, Aurora PostgreSQL 14.11.5, and Aurora PostgreSQL 13.14.5, compatible with PostgreSQL 16.2, 15.6, 14.11, and 13.14.	April 16, 2025

Aurora PostgreSQL releases versions 16.8, 15.12, 14.17, and 13.20	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 16.8, Aurora PostgreSQL 15.12, Aurora PostgreSQL 14.17, and Aurora PostgreSQL 13.20, including Babelfish 4.5.0, Babelfish 3.9.0, Babelfish 2.12.0, apg_plan_mgmt version 2.8 for Aurora PostgreSQL 16.8, apg_plan_mgmt version 2.8 for Aurora PostgreSQL 15.12, apg_plan_mgmt version 2.8 for Aurora PostgreSQL 14.17, apg_plan_mgmt version 2.8 for Aurora PostgreSQL 13.20, compatible with PostgreSQL 16.8, 15.12, 14.17, and 13.20.	April 8, 2025
Aurora PostgreSQL patch releases 16.2.4, 15.6.4, 14.11.4, 13.14.4, and 12.18.4	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 16.2.4, Aurora PostgreSQL 15.6.4, Aurora PostgreSQL 14.11.4, Aurora PostgreSQL 13.14.4, and Aurora PostgreSQL 12.18.4, compatible with PostgreSQL 16.2, 15.6, 14.11, 13.14, and 12.18.	February 2, 2025

Aurora PostgreSQL patch releases 16.4.2, 15.8.2, 14.13.2, 13.16.2, and 12.20.2	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 16.4.2, Aurora PostgreSQL 15.8.2, Aurora PostgreSQL 14.13.2, Aurora PostgreSQL 13.16.2, and Aurora PostgreSQL 12.20.2, compatible with PostgreSQL 16.4, 15.8, 14.13, 13.16, and 12.20.	January 29, 2025
Aurora PostgreSQL Limitless Database release 16.6.100	Amazon Aurora PostgreSQL Limitless Database 16.6.100, compatible with PostgreSQL 16.6.	January 24, 2025

Aurora PostgreSQL releases versions 16.6, 15.10, 14.15, 13.18, and 12.22	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 16.6, Aurora PostgreSQL 15.10, Aurora PostgreSQL 14.15, Aurora PostgreSQL 13.18, and Aurora PostgreSQL 12.22, including Babelfish 4.4.0, Babelfish 3.8.0, Babelfish 2.11.0, apg_plan_mgmt version 2.7 for Aurora PostgreSQL 16.6, apg_plan_mgmt version 2.7 for Aurora PostgreSQL 15.10, apg_plan_mgmt version 2.7 for Aurora PostgreSQL 14.15, apg_plan_mgmt version 2.7 for Aurora PostgreSQL 13.18, apg_plan_mgmt version 2.7 for Aurora PostgreSQL 12.22, compatible with PostgreSQL 16.6, 15.10, 14.15, 13.18, and 12.22.	December 27, 2024
Aurora PostgreSQL releases version 17.0 Preview	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 17.0 in the Amazon RDS Preview environment, compatible with PostgreSQL 17.0.	November 20, 2024
Aurora PostgreSQL Limitless Database release 16.4.104	Amazon Aurora PostgreSQL Limitless Database 16.4.104, compatible with PostgreSQL 16.4.	November 19, 2024

Aurora PostgreSQL Limitless Database	Amazon Aurora PostgreSQL Limitless Database is a new, automated, horizontal scaling (sharding) capability of Amazon Aurora. Aurora PostgreSQL Limitless Database lets you scale beyond the existing Aurora limits for write throughput and storage by distributing a database workload over multiple Aurora writer instances, while maintaining the ability to use it as a single database. For more information, see Amazon Aurora PostgreSQL Limitless Database.	October 31, 2024
Aurora PostgreSQL releases versions 16.4, 15.8, 14.13, 13.16, and 12.20	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 16.4, Aurora PostgreSQL 15.8, Aurora PostgreSQL 14.13, Aurora PostgreSQL 13.16, and Aurora PostgreSQL 12.20, including Babelfish 4.3.0, Babelfish 3.7.0, Babelfish 2.10.0, apg_plan_mgmt version 2.7 for Aurora PostgreSQL 15.8 compatible with PostgreSQL 16.4, 15.8, 14.13, 13.16, and 12.20.	September 30, 2024

Aurora PostgreSQL releases versions 16.3, 15.7, 14.12, 13.15, and 12.19	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 16.3, Aurora PostgreSQL 15.7, Aurora PostgreSQL 14.12, Aurora PostgreSQL 13.15, and Aurora PostgreSQL 12.19, including Babelfish 4.2.0, Babelfish 3.6.0, Babelfish 2.9.0, apg_plan_mgmt version 2.7 for Aurora PostgreSQL 16.3, apg_plan_mgmt version 2.7 for Aurora PostgreSQL 15.7, apg_plan_mgmt version 2.7 for Aurora PostgreSQL 14.12, apg_plan_mgmt version 2.7 for Aurora PostgreSQL 13.15, apg_plan_mgmt version 2.7 for Aurora PostgreSQL 12.19, compatible with PostgreSQL 16.3, 15.7, 14.12, 13.15, and 12.19.	August 8, 2024

Aurora PostgreSQL releases versions 16.2, 15.6, 14.11, 13.14, and 12.18	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 16.2, Aurora PostgreSQL 15.6, Aurora PostgreSQL 14.11, Aurora PostgreSQL 13.14, and Aurora PostgreSQL 12.18, including Babelfish 4.1.0, Babelfish 3.5.0, Babelfish 2.8.0, Aurora PostgreSQL apg_plan_mgmt extension version 2.6, compatible with PostgreSQL 16.2, 15.6, 14.11, 13.14, and 12.18.	April 29, 2024
Aurora PostgreSQL releases versions 16.1.3, 15.5.3, 14.10.3, 13.13.3, and 12.17.3	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 16.1.3, Aurora PostgreSQL 15.5.3, Aurora PostgreSQL 14.10.3, Aurora PostgreSQL 13.13.3, and Aurora PostgreSQL 12.17.3, compatible with PostgreSQL 16.1, 15.5, 14.10, 13.13, and 12.17.	March 13, 2024
Aurora PostgreSQL releases versions 15.4.6, 14.9.6, 13.12.6, 12.16.6 and 11.21.6	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 15.4.6, Aurora PostgreSQL 14.9.6, Aurora PostgreSQL 13.12.6, Aurora PostgreSQL 12.16.6, and Aurora PostgreSQL 11.21.6, compatible with PostgreSQL 15.4, 14.9, 13.12, 12.16, and 11.21.	March 13, 2024

Aurora PostgreSQL releases versions 15.3.5, 14.8.5, 13.11.5, and 12.15.5	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 15.3.5, Aurora PostgreSQL 14.8.5, Aurora PostgreSQL 13.11.5, and Aurora PostgreSQL 12.15.5, compatible with PostgreSQL 15.3, 14.8, 13.11, and 12.15.	March 13, 2024
Aurora PostgreSQL releases versions 15.2.7, 14.7.7, 13.10.7, and 12.14.7	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 15.2.7, Aurora PostgreSQL 14.7.7, Aurora PostgreSQL 13.10.7, and Aurora PostgreSQL 12.14.7, compatible with PostgreSQL 15.2, 14.7, 13.10, and 12.14.	March 13, 2024
Aurora PostgreSQL releases versions 14.6.8, 13.9.8, and 12.13.8	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 14.6.8, Aurora PostgreSQL 13.9.8, and Aurora PostgreSQL 12.13.8, compatible with PostgreSQL 14.6, 13.9, and 12.13.	March 13, 2024
Aurora PostgreSQL releases versions 14.5.6, 13.8.6, and 12.12.6	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 14.5.6, Aurora PostgreSQL 13.8.6, and Aurora PostgreSQL 12.12.6, compatible with PostgreSQL 14.5, 13.8, and 12.12.	March 13, 2024

Aurora PostgreSQL releases versions 14.4.9, 14.3.9, 13.7.9, and 12.11.9	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 14.4.9, Aurora PostgreSQL 14.3.9, Aurora PostgreSQL 13.7.9, and Aurora PostgreSQL 12.11.9, compatible with PostgreSQL 14.4, 14.3, 13.7, and 12.11.	March 13, 2024
Aurora PostgreSQL releases versions 12.9.11	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 12.9.11, compatible with PostgreSQL 12.9.	March 13, 2024
Aurora PostgreSQL releases versions 11.9.11	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 11.9.11, compatible with PostgreSQL 11.9.	March 13, 2024
Aurora PostgreSQL releases versions 16.1.2, 15.5.2, 14.10.2, 13.13.2, and 12.17.2	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 16.1.2, Aurora PostgreSQL 15.5.2, Aurora PostgreSQL 14.10.2, Aurora PostgreSQL 13.13.2, and Aurora PostgreSQL 12.17.2, compatible with PostgreSQL 16.1, 15.5, 14.10, 13.13, and 12.17.	February 22, 2024

Aurora PostgreSQL releases versions 15.4.5, 14.9.5, 13.12.5, 12.16.5, and 11.21.5	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 15.4.5, Aurora PostgreSQL 14.9.5, Aurora PostgreSQL 13.12.5, Aurora PostgreSQL 12.16.5, and Aurora PostgreSQL 11.21.5, compatible with PostgreSQL 15.4, 14.9, 13.12, 12.16 and 11.21.	February 22, 2024
Aurora PostgreSQL releases version 16.1	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 16.1, including Babelfish 4.0.0, compatible with PostgreSQL 16.1.	January 31, 2024
Aurora PostgreSQL releases version 12.9.10	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 12.9.10, compatible with PostgreSQL 12.9.	December 27, 2023
Aurora PostgreSQL releases version 11.9.9	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 11.9.9, compatible with PostgreSQL 11.9.	December 27, 2023

Aurora PostgreSQL releases versions 14.4.8, 14.3.8, 13.7.8, and 12.11.8	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 14.4.8, Aurora PostgreSQL 14.3.8, Aurora PostgreSQL 13.7.8, and Aurora PostgreSQL 12.11.8, compatible with PostgreSQL 14.4, 14.3, 13.7, and 12.11.	December 22, 2023
Aurora PostgreSQL releases versions 15.5.0, 14.10.0, 13.13.0, and 12.17.0	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 15.5.0 including Babelfish 3.4.0, Aurora PostgreSQL 14.10.0, Aurora PostgreSQL 13.13.0, and Aurora PostgreSQL 12.17.0, compatible with PostgreSQL 15.5, 14.10, 13.13, and 12.17.	December 21, 2023
Aurora PostgreSQL releases versions 14.5.5, 13.8.5, and 12.12.5	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 14.5.5, Aurora PostgreSQL 13.8.5, and Aurora PostgreSQL 12.12.5, compatible with PostgreSQL 14.5, 13.8, and 12.12.	December 18, 2023
Aurora PostgreSQL releases versions 15.4.3 and 14.9.3	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 15.4.3, Aurora PostgreSQL 14.9.3, compatible with PostgreSQL 15.4 and 14.9.	December 15, 2023

Aurora PostgreSQL releases versions 15.2.6, 14.7.6, 13.10.6, and 12.14.6	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 15.2.6, Aurora PostgreSQL 14.7.6, Aurora PostgreSQL 13.10.6, and Aurora PostgreSQL 12.14.6, compatible with PostgreSQL 15.2, 14.7, 13.10, and 12.14.	December 15, 2023
Aurora PostgreSQL releases versions 14.6.7, 13.9.7, and 12.13.7	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 14.6.7, Aurora PostgreSQL 13.9.7, and Aurora PostgreSQL 12.13.7, compatible with PostgreSQL 14.6, 13.9, and 12.13.	December 15, 2023
Aurora PostgreSQL releases versions 15.3.4, 14.8.4, 13.11.4, and 12.15.4	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 15.3.4, Aurora PostgreSQL 14.8.4, Aurora PostgreSQL 13.11.4, Aurora PostgreSQL 12.15.4, compatible with PostgreSQL 15.3, 14.8, 13.11, and 12.15.	December 14, 2023

Aurora PostgreSQL releases versions 15.4.2, 14.9.2, 13.12.2, 12.16.2, and 11.21.2	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 15.4.2, Aurora PostgreSQL 14.9.2, Aurora PostgreSQL 13.12.2, Aurora PostgreSQL 12.16.2, and Aurora PostgreSQL 11.21.2, compatible with PostgreSQL 15.4, 14.9, 13.12, 12.16, and 11.21.	December 13, 2023
Aurora PostgreSQL releases versions 14.5.4, 13.8.4, and 12.12.4	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 14.5.4, Aurora PostgreSQL 13.8.4, and Aurora PostgreSQL 12.12.4, compatible with PostgreSQL 14.5, 13.8, and 12.12.	November 17, 2023
Aurora PostgreSQL releases versions 14.4.7, 14.3.7, 13.7.7, and 12.11.7	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 14.4.7, Aurora PostgreSQL 14.3.7, Aurora PostgreSQL 13.7.7, and Aurora PostgreSQL 12.11.7, compatible with PostgreSQL 14.4, 14.3, 13.7, and 12.11.	November 17, 2023
Aurora PostgreSQL releases version 12.9.9	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 12.9.9, compatible with PostgreSQL 12.9.	November 17, 2023

Aurora PostgreSQL releases versions 14.6.6, 13.9.6, and 12.13.6	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 14.6.6, Aurora PostgreSQL 13.9.6, and Aurora PostgreSQL 12.13.6, compatible with PostgreSQL 14.6, 13.9, and 12.13.	November 15, 2023
Aurora PostgreSQL releases version 16.0 Preview	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 16.0 in the Amazon RDS Preview environment, compatible with PostgreSQL 16.0.	November 15, 2023
Aurora PostgreSQL releases versions 15.3.3, 14.8.3, 13.11.3, and 12.15.3	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 15.3.3, Aurora PostgreSQL 14.8.3, Aurora PostgreSQL 13.11.3, Aurora PostgreSQL 12.15.3, compatible with PostgreSQL 15.3, 14.8, 13.11, and 12.15.	November 14, 2023
Aurora PostgreSQL releases versions 15.2.5, 14.7.5, 13.10.5, and 12.14.5	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 15.2.5, Aurora PostgreSQL 14.7.5, Aurora PostgreSQL 13.10.5, and Aurora PostgreSQL 12.14.5, compatible with PostgreSQL 15.2, 14.7, 13.10, and 12.14.	November 14, 2023

Aurora PostgreSQL releases versions 15.4.1, 14.9.1, 13.12.1, 12.16.1, and 11.21.1	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 15.4.1, Aurora PostgreSQL 14.9.1, Aurora PostgreSQL 13.12.1, Aurora PostgreSQL 12.16.1, and Aurora PostgreSQL 11.21.1, compatible with PostgreSQL 15.4, 14.9, 13.12, 12.16, and 11.21.	November 8, 2023
Aurora PostgreSQL releases versions 15.4.0, 14.9.0, 13.12.0, 12.16.0, and 11.21.0	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 15.4.0 including Babelfish 3.3.0, Aurora PostgreSQL 14.9.0 including Babelfish 2.6.0, Aurora PostgreSQL 13.12.0, Aurora PostgreSQL 12.16.0, and Aurora PostgreSQL 11.21.0, compatible with PostgreSQL 15.4, 14.9, 13.12, 12.16, and 11.21.	October 24, 2023
Aurora PostgreSQL releases versions 14.4.6, 14.3.6, 13.7.6, 12.11.6, and 11.16.6	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 14.4.6, Aurora PostgreSQL 14.3.6, Aurora PostgreSQL 13.7.6, Aurora PostgreSQL 12.11.6, and Aurora PostgreSQL 11.16.6, compatible with PostgreSQL 14.4, 14.3, 13.7, 12.11, and 11.16.	October 19, 2023

Aurora PostgreSQL releases version 12.9.8	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 12.9.8, compatible with PostgreSQL 12.9.	October 19, 2023
Aurora PostgreSQL releases versions 14.5.3, 13.8.3, 12.12.3 and 11.17.3	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 14.5.3 including Babelfish 2.2.3, Aurora PostgreSQL 13.8.3, Aurora PostgreSQL 12.12.3 and Aurora PostgreSQL 11.17.3, compatible with PostgreSQL 14.5, 13.8, 12.12 and 11.17.	October 17, 2023
Aurora PostgreSQL releases version 11.9.8	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 11.9.8, compatible with PostgreSQL 11.9.	October 10, 2023
Aurora PostgreSQL releases versions 15.2.4, 14.7.4, 13.10.4 12.14.4 and 11.19.4	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 15.2.4 including Babelfish 3.1.3, Aurora PostgreSQL 14.7.4 including Babelfish 2.4.3, Aurora PostgreSQL 13.10.4, Aurora PostgreSQL 12.14.4, and Aurora PostgreSQL 11.19.4, compatible with PostgreSQL 15.2, 14.7, 13.10, 12.14 and 11.19.	October 5, 2023

Aurora PostgreSQL releases versions 15.3.2, 14.8.2, 13.11.2, 12.15.2 and 11.20.2	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 15.3.2 including Babelfish 3.2.1, Aurora PostgreSQL 14.8.2 including Babelfish 2.5.1, Aurora PostgreSQL 13.11.2, Aurora PostgreSQL 12.15.2, and Aurora PostgreSQL 11.20.2, compatible with PostgreSQL 15.3, 14.8, 13.11, 12.15 and 11.20.	October 4, 2023
Aurora PostgreSQL releases versions 14.6.5, 13.9.5, 12.13.5, and 11.18.5	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 14.6.5, Aurora PostgreSQL 13.9.5, Aurora PostgreSQL 12.13.5, and Aurora PostgreSQL 11.18.5, compatible with PostgreSQL 14.6, 13.9, 12.13 and 11.18.	October 4, 2023
Aurora PostgreSQL releases versions 14.6.4, 13.9.4, 12.13.4 and 11.18.4	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 14.6.4 including Babelfish 2.3.3, Aurora PostgreSQL 13.9.4, Aurora PostgreSQL 12.13.4, and Aurora PostgreSQL 11.18.4, compatible with PostgreSQL 14.6, 13.9, 12.13 and 11.18.	September 13, 2023

Aurora PostgreSQL releases versions 13.5.7, 12.9.7, and 11.14.7	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 13.5.7, Aurora PostgreSQL 12.9.7, and Aurora PostgreSQL 11.14.7, compatible with PostgreSQL 13.5, 12.9, and 11.14.	August 24, 2023
Aurora PostgreSQL releases versions 15.2.3, 14.7.3, 13.10.3, 12.14.3, and 11.19.3	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 15.2.3 including Babelfish 3.1.2, Aurora PostgreSQL 14.7.3 including Babelfish 2.4.2, Aurora PostgreSQL 13.10.3, Aurora PostgreSQL 12.14.3, and Aurora PostgreSQL 11.19.3, compatible with PostgreSQL 15.2, 14.7, 13.10, 12.14, and 11.19.	July 25, 2023
Aurora PostgreSQL releases versions 15.3.0, 14.8.0, 13.11.0, 12.15.0, and 11.20.0	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 15.3.0 including Babelfish 3.2.0, Aurora PostgreSQL 14.8.0 including Babelfish 2.5.0, Aurora PostgreSQL 13.11.0, Aurora PostgreSQL 12.15.0, and Aurora PostgreSQL 11.20.0, compatible with PostgreSQL 15.3, 14.8, 13.11, 12.15, and 11.20.	July 13, 2023

Aurora PostgreSQL releases versions 15.2.2, 14.7.2, 13.10.2, 12.14.2, and 11.19.2	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 15.2.2 including Babelfish 3.1.1, Aurora PostgreSQL 14.7.2 including Babelfish 2.4.1, Aurora PostgreSQL 13.10.2, Aurora PostgreSQL 12.14.2, and Aurora PostgreSQL 11.19.2, compatible with PostgreSQL 15.2, 14.7, 13.10, 12.14, and 11.19.	May 10, 2023
Aurora PostgreSQL releases versions 15.2.1, 14.7.1, 13.10.1, 12.14.1, and 11.19.1	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 15.2.1 including Babelfish 3.1.0 that has new features and several enhancements, Aurora PostgreSQL 14.7.1 including Babelfish 2.4.0 that has new features and several enhancements, Aurora PostgreSQL 13.10.1, Aurora PostgreSQL 12.14.1 and Aurora PostgreSQL 11.19.1, compatible with PostgreSQL 15.2, 14.7, 13.10, 12.14, and 11.19.	April 5, 2023

Aurora PostgreSQL releases versions 14.6.2, 13.9.2, 12.13.2, and 11.18.2	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 14.6.2 including Babelfish 2.3.2 that has an enhancement, Aurora PostgreSQL 13.9.2, Aurora PostgreSQL 12.13.2 and Aurora PostgreSQL 11.18.2, compatible with PostgreSQL 14.6, 13.9, 12.13, and 11.18.	March 3, 2023
Aurora PostgreSQL releases versions 14.5.2, 13.8.2, 12.12.2, and 11.17.2	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 14.5.2, Aurora PostgreSQL 13.8.2, Aurora PostgreSQL 12.12.2 and Aurora PostgreSQL 11.17.2, compatible with PostgreSQL 14.5, 13.8, 12.12, and 11.17.	March 2, 2023
Aurora PostgreSQL releases version 14.6.1	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 14.6.1, compatible with PostgreSQL 14.6.	February 17, 2023

Aurora PostgreSQL releases versions 14.6.0, 13.9.0, 12.13.0, and 11.18.0	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 14.6.0 including Babelfish update 2.3.0 that has new features and several enhancements, Aurora PostgreSQL 13.9.0 including Babelfish update 1.5.0 that has a new feature and an enhancement, Aurora PostgreSQL 12.13.0, and Aurora PostgreSQL 11.18.0, compatible with PostgreSQL 14.6, 13.9, 12.13, and 11.18.	January 20, 2023
Aurora PostgreSQL releases versions 13.3.5, 12.7.5, 11.12.5, and 10.17.5	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 13.3.5, Aurora PostgreSQL 12.7.5, Aurora PostgreSQL 11.12.5, and Aurora PostgreSQL 10.17.5, compatible with PostgreSQL 13.3, 12.7, 11.12, and 10.17.	December 30, 2022
Aurora PostgreSQL releases version 11.9.7	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 11.9.7, compatible with PostgreSQL 11.9.	December 22, 2022

Aurora PostgreSQL releases versions 13.4.6, 12.8.6, 11.13.6, and 10.18.6	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 13.4.6, Aurora PostgreSQL 12.8.6, Aurora PostgreSQL 11.13.6, and Aurora PostgreSQL 10.18.6, compatible with PostgreSQL 13.4, 12.8, 11.13, and 10.18.	December 19, 2022
Aurora PostgreSQL releases versions 13.6.6, 12.10.6, 11.15.6, and 10.20.6	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 13.6.6, Aurora PostgreSQL 12.10.6, Aurora PostgreSQL 11.15.6, and Aurora PostgreSQL 10.20.6, compatible with PostgreSQL 13.6, 12.10, 11.15, and 10.20.	December 16, 2022
Aurora PostgreSQL releases versions 13.5.6, 12.9.6, 11.14.6, and 10.19.6	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 13.5.6, Aurora PostgreSQL 12.9.6, Aurora PostgreSQL 11.14.6, and Aurora PostgreSQL 10.19.6, compatible with PostgreSQL 13.5, 12.9, 11.14, and 10.19.	December 16, 2022

Aurora PostgreSQL releases versions 14.4.5, 14.3.5, 13.7.5, 12.11.5, 11.16.5, and 10.21.5	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 14.4.5, Aurora PostgreSQL 14.3.5, Aurora PostgreSQL 13.7.5, Aurora PostgreSQL 12.11.5, Aurora PostgreSQL 11.16.5 and Aurora PostgreSQL 10.21.5, compatible with PostgreSQL 14.4, 13.7, 12.11, 11.16, and 10.21.	December 14, 2022
Aurora PostgreSQL releases versions 14.5.1, 13.8.1, 12.12.1, and 11.17.1	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 14.5.1, Aurora PostgreSQL 13.8.1, Aurora PostgreSQL 12.12.1, Aurora PostgreSQL 11.17.1, compatible with PostgreSQL 14.5, 13.8, 12.12, and 11.17.	December 13, 2022
Aurora PostgreSQL releases versions 14.4.4, 14.3.4, 13.7.4, 12.11.4, 11.16.4, and 10.21.4	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 14.4.4, Aurora PostgreSQL 14.3.4, Aurora PostgreSQL 13.7.4, Aurora PostgreSQL 12.11.4, Aurora PostgreSQL 11.16.4 and Aurora PostgreSQL 10.21.4, compatible with PostgreSQL 14.4, 14.3, 13.7, 12.11, 11.16, and 10.21.	November 17, 2022

Aurora PostgreSQL releases versions 14.5, 13.8, 12.12, and 11.17	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 14.5 including Babelfish updates 2.2.0 and 2.2.1 that has new features and several enhancements, Aurora PostgreSQL 13.8, Aurora PostgreSQL 12.12, and Aurora PostgreSQL 11.17, compatible with PostgreSQL 14.5, 13.8, 12.12, and 11.17.	November 9, 2022
Aurora PostgreSQL releases versions 13.6.5, 13.5.5, and 13.4.5	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 13.6.5, Aurora PostgreSQL 13.5.5, Aurora PostgreSQL 13.4.5, compatible with PostgreSQL 13.6, 13.5, and 13.4.	October 18, 2022
Aurora PostgreSQL releases versions 14.4, 14.3.3, 13.7.3, 12.11.3, 11.16.3, and 10.21.3	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 14.4, Aurora PostgreSQL 14.3.3, Aurora PostgreSQL 13.7.3, Aurora PostgreSQL 12.11.3, Aurora PostgreSQL 11.16.3, and Aurora PostgreSQL 10.21.3, compatible with PostgreSQL 14.4, 14.3, 13.7, 12.11, 11.16, and 10.21.	October 13, 2022

Aurora PostgreSQL releases versions 13.5.4, 12.9.4, 11.14.4, and 10.19.4	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 13.5.4, Aurora PostgreSQL 12.9.4, Aurora PostgreSQL 11.14.4, and Aurora PostgreSQL 10.19.4, compatible with PostgreSQL 13.5, 12.9, 11.14, and 10.19.	July 20, 2022
Aurora PostgreSQL releases versions 13.6.4, 12.10.4, 11.15.4, and 10.20.4	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 13.6.4, Aurora PostgreSQL 12.10.4, Aurora PostgreSQL 11.15.4, and Aurora PostgreSQL 10.20.4, compatible with PostgreSQL 13.6, 12.10, 11.15, and 10.20.	July 18, 2022
Aurora PostgreSQL releases versions 13.3.4, 12.7.4, 11.12.4, and 10.17.4	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 13.3.4, Aurora PostgreSQL 12.7.4, Aurora PostgreSQL 11.12.4, and Aurora PostgreSQL 10.17.4, compatible with PostgreSQL 13.3, 12.7, 11.12, and 10.17.	July 14, 2022
Aurora PostgreSQL releases version 11.9.6	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 11.9.6, compatible with PostgreSQL 11.9.	July 8, 2022

Aurora PostgreSQL releases versions 14.3.1, 13.7.1, 12.11.1, 11.16.1, and 10.21.1	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 14.3.1, Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 13.7.1, Aurora PostgreSQL 12.11.1, Aurora PostgreSQL 11.16.1, and Aurora PostgreSQL 10.21.1, compatible with PostgreSQL 14.3, 13.7, 12.11, 11.16, and 10.21.	July 6, 2022
Aurora PostgreSQL releases versions 13.4.4, 12.8.4, 11.13.4, and 10.18.4	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 13.4.4, Aurora PostgreSQL 12.8.4, Aurora PostgreSQL 11.13.4, and Aurora PostgreSQL 10.18.4, compatible with PostgreSQL 13.4, 12.8, 11.13, and 10.18.	July 6, 2022
Aurora PostgreSQL releases version 14.3	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 14.3, compatible with PostgreSQL 14.3.	June 21, 2022

Aurora PostgreSQL releases versions 13.7, 12.11, 11.16, and 10.21	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 13.7, Aurora PostgreSQL 12.11, Aurora PostgreSQL 11.16, and Aurora PostgreSQL 10.21, compatible with PostgreSQL 13.7, PostgreSQL 12.11, PostgreSQL 11.16, and PostgreSQL 10.21.	June 9, 2022
Aurora PostgreSQL releases versions 11.13.3 and 10.18.3	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 11.13.3 and Aurora PostgreSQL 10.18.3, compatible with PostgreSQL 11.13 and PostgreSQL 10.18.	June 6, 2022
Aurora PostgreSQL releases version 13.6.3	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 13.6.3, compatible with PostgreSQL 13.6.	June 2, 2022
Aurora PostgreSQL releases version 13.6.2	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 13.6.2, compatible with PostgreSQL 13.6.	May 12, 2022

Aurora PostgreSQL releases versions 13.6.1, 12.10.1, 11.15.1, and 10.20.1	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 13.6.1 including Babelfish update 1.2.1 which resolves several minor issues, Aurora PostgreSQL 12.10.1, Aurora PostgreSQL 11.15.1, and Aurora PostgreSQL 10.20.1, compatible with PostgreSQL 13.6, PostgreSQL 12.10, PostgreSQL 11.15, and PostgreSQL 10.20.	April 27, 2022
Aurora PostgreSQL releases versions 13.5.3, 12.9.3, 11.14.3, and 10.19.3	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 13.5.3, Aurora PostgreSQL 12.9.3, Aurora PostgreSQL 11.14.3, and Aurora PostgreSQL 10.19.3, compatible with PostgreSQL 13.5, PostgreSQL 12.9, PostgreSQL 11.14, and PostgreSQL 10.19.	April 13, 2022
Aurora PostgreSQL releases versions 13.4.2, 12.8.2, 11.13.2, and 10.18.2	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 13.4.2, Aurora PostgreSQL 12.8.2, Aurora PostgreSQL 11.13.2, and Aurora PostgreSQL 10.18.2, compatible with PostgreSQL 13.4, PostgreSQL 12.8, PostgreSQL 11.13, and PostgreSQL 10.18.	April 12, 2022

Aurora PostgreSQL releases versions 13.3.3, 4.2.3, and 4.1.2	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 13.3.3, Aurora PostgreSQL 4.2.3, and Aurora PostgreSQL 4.1.2, compatible with PostgreSQL 13.3, 12.7, and PostgreSQL 12.6.	April 7, 2022
Aurora PostgreSQL releases versions 13.6, 12.10, 11.15, and 10.20	Amazon Aurora PostgreSQL-Compatible Edition releases Aurora PostgreSQL 13.6, Aurora PostgreSQL 12.10, Aurora PostgreSQL 11.15, and Aurora PostgreSQL 10.20, compatible with PostgreSQL 13.6, 12.10, 11.15, and 10.20.	March 29, 2022
Initial release	Initial release of the *Release Notes for Aurora PostgreSQL*.	March 22, 2022

Earlier updates

The following table describes the important changes in each release of the *Release Notes for Aurora PostgreSQL* before March 22, 2022.

Change	Description	Date changed
Aurora PostgreSQL releases 13.5, 12.9, 11.14, and 10.19	New releases of Amazon Aurora PostgreSQL-Compatible Edition support compatibility with PostgreSQL 13.5, PostgreSQL 12.9, PostgreSQL 11.14, and PostgreSQL 10.19.	February 25, 2022
Aurora PostgreSQL releases 13.4,	New releases of Amazon Aurora PostgreSQL-Compatible Edition support compatibility with PostgreSQ	October 28, 2021

Change	Description	Date changed
12.8, 11.13, and 10.18	L 13.4, PostgreSQL 12.8, PostgreSQL 11.13, and PostgreSQL 10.18.	
Aurora PostgreSQL releases 13.3	A new release of Aurora PostgreSQL supports compatibility with 13.3.	August 26, 2021
Aurora PostgreSQL releases 12.7, 11.12, 10.17, and 9.6.22	New releases of Amazon Aurora PostgreSQL-Compatible Edition support compatibility with PostgreSQL 12.7, PostgreSQL 11.12, PostgreSQL 10.17, and PostgreSQL 9.6.22.	August 19, 2021
Aurora PostgreSQL releases 4.1.0, 3.5.0, 2.8.0, and 1.10.0 compatible with PostgreSQL 12.6, 11.11, 10.16, and 9.6.21	New versions of Amazon Aurora PostgreSQL-Compatible Edition include 4.1.0 (compatible with PostgreSQL 12.6), 3.5.0 (compatible with PostgreSQL 11.11), 2.8.0 (compatible with PostgreSQL 10.16), and 1.10.0 (compatible with PostgreSQL 9.6.21).	June 17, 2021
Aurora PostgreSQL patch releases 3.2.7, 2.5.7, 1.7.7 compatible with PostgreSQL 11.7, 10.12, 9.6.17	New patch releases of Amazon Aurora PostgreSQL-Compatible Edition include release 3.2.7 compatible with PostgreSQL 11.7, release 2.5.7 compatible with PostgreSQL 10.12, and release 1.7.7 compatible with PostgreSQL 9.6.17.	May 11, 2021
Aurora PostgreSQL patch releases 3.1.4, 2.4.4, 1.6.4 compatible with PostgreSQL 11.6, 10.11, 9.6.16	New patch releases of Amazon Aurora PostgreSQL-Compatible Edition include release 3.1.4 compatible with PostgreSQL 11.6, release 2.4.4 compatible with PostgreSQL 10.11, and release 1.6.4 compatible with PostgreSQL 9.6.16.	May 11, 2021

Change	Description	Date changed
Aurora PostgreSQL patch releases 4.0.2, 3.4.2, 2.7.2, 1.9.2 compatible with PostgreSQL 12.4, 11.9, 10.14, 9.6.19	New patch releases of Amazon Aurora PostgreSQL-Compatible Edition include release 4.0.2 compatible with PostgreSQL 12.4, release 3.4.2 compatible with PostgreSQL 11.9, release 2.7.2 compatible with PostgreSQL 10.14, and release 1.9.2 compatible with PostgreSQL 9.6.19.	April 23, 2021
Aurora PostgreSQL patch releases 4.0.1, 3.4.1, 2.7.1, 1.9.1 compatible with PostgreSQL 12.4, 11.9, 10.14, 9.6.19	New patch releases of Amazon Aurora PostgreSQL-Compatible Edition include release 4.0.1 compatible with PostgreSQL 12.4, release 3.4.1 compatible with PostgreSQL 11.9, release 2.7.1 compatible with PostgreSQL 10.14, and release 1.9.1 compatible with PostgreSQL 9.6.19.	March 12, 2021
Aurora PostgreSQL patch releases 3.3.2, 2.6.2, 1.8.2 compatible with PostgreSQL 11.8, 10.13, 9.6.18	New patch releases of Amazon Aurora PostgreSQL-Compatible Edition include release 3.3.2 compatible with PostgreSQL 11.8, release 2.6.2 compatible with PostgreSQL 10.13, and release 1.8.2 compatible with PostgreSQL 9.6.18.	February 12, 2021
Aurora PostgreSQL release 4.0 compatible with PostgreSQL 12.4	Amazon Aurora PostgreSQL release 4.0 is available and compatible with PostgreSQL 12.4.	January 28, 2021
Aurora PostgreSQL releases 3.4.0, 2.7.0, and 1.9.0	New releases of Amazon Aurora PostgreSQL-Compatible Edition include release 3.4.0 (compatible with PostgreSQL 11.9), release 2.7.0 (compatible with PostgreSQL 10.14), and release 1.9.0 (compatible with PostgreSQL 9.6.19).	December 11, 2020

Change	Description	Date changed
Aurora PostgreSQL releases 3.2.6, 2.5.6, and 1.7.6	New releases of Amazon Aurora PostgreSQL-Compatible Edition include release 3.2.6 (compatible with PostgreSQL 11.7), release 2.5.6 (compatible with PostgreSQL 10.12), and release 1.7.6 (compatible with PostgreSQL 9.6.17).	November 13, 2020
Aurora PostgreSQL supports the pglogical extension	Aurora PostgreSQL now supports the PostgreSQL `pglogical` extension version 2.2.2.	September 22, 2020
Aurora PostgreSQL bug fix for very specific queries that use `NOT EXISTS`	Fixed a bug for very specific queries that use the `NOT EXISTS` operator on Aurora PostgreSQL releases that were released on or after May 24, 2020. The fix is available in Aurora PostgreSQL 2.5.4, Aurora PostgreSQL 2.6.1, Aurora PostgreSQL 3.2.4, and Aurora PostgreSQL 3.3.1.	September 17, 2020
Aurora PostgreSQL releases 3.3.0, 2.6.0, and 1.8.0	New releases of Amazon Aurora PostgreSQL-Compatible Edition include Aurora PostgreSQL release 3.3.0 (compatible with PostgreSQL 11.8), Aurora PostgreSQL release 2.6.0 (compatible with PostgreSQL 10.13), and Aurora PostgreSQL release 1.8.0 (compatible with PostgreSQL 9.6.18).	September 3, 2020
Aurora PostgreSQL releases 3.2.3, 2.5.3, and 1.7.3	New releases of Amazon Aurora PostgreSQL-Compatible Edition include Aurora PostgreSQL release 3.2.3 (compatible with PostgreSQL 11.7), Aurora PostgreSQL release 2.5.3 (compatible with PostgreSQL 10.12), and Aurora PostgreSQL release 1.7.3 (compatible with PostgreSQL 9.6.17).	August 27, 2020

Change	Description	Date changed
Aurora PostgreSQL releases 3.1.3, 2.4.3, and 1.6.3	New patch releases of Aurora PostgreSQL include Aurora PostgreSQL release 3.1.3 (compatible with PostgreSQL 11.6), Aurora PostgreSQL release 2.4.3 (compatible with PostgreSQL 10.11), and Aurora PostgreSQL release 1.6.3 (compatible with PostgreSQL 9.6.16).	July 27, 2020
Aurora PostgreSQL releases 3.2.2, 2.5.2, and 1.7.2	New releases of Amazon Aurora PostgreSQL-Compatible Edition include Aurora PostgreSQL release 3.2.2 (compatible with PostgreSQL 11.7), Aurora PostgreSQL release 2.5.2 (compatible with PostgreSQL 10.12), and Aurora PostgreSQL release 1.7.2 (compatible with PostgreSQL 9.6.17).	July 9, 2020
Aurora PostgreSQL releases 3.2.1, 2.5.1, and 1.7.1	New releases of Amazon Aurora PostgreSQL-Compatible Edition include Aurora PostgreSQL release 3.2.1 (compatible with PostgreSQL 11.7), Aurora PostgreSQL release 2.5.1 (compatible with PostgreSQL 10.12), and Aurora PostgreSQL release 1.7.1 (compatible with PostgreSQL 9.6.17).	June 4, 2020
Aurora PostgreSQL releases 3.1.2, 2.4.2, and 1.6.2	New patch releases of Aurora PostgreSQL include Aurora PostgreSQL release 3.1.2 (compatible with PostgreSQL 11.6), Aurora PostgreSQL release 2.4.2 (compatible with PostgreSQL 10.11), and Aurora PostgreSQL release 1.6.2 (compatible with PostgreSQL 9.6.16).	April 17, 2020
Aurora PostgreSQL releases 3.1.1, 2.4.1, and 1.6.1	New patch releases of Aurora PostgreSQL include Aurora PostgreSQL release 3.1.1 (compatible with PostgreSQL 11.6), Aurora PostgreSQL release 2.4.1 (compatible with PostgreSQL 10.11), and Aurora PostgreSQL release 1.6.1 (compatible with PostgreSQL 9.6.16).	April 16, 2020

Change	Description	Date changed
Aurora PostgreSQL releases 3.1, 2.4, and 1.6	New releases of Amazon Aurora PostgreSQL-Compatible Edition include Aurora PostgreSQL release 3.1 (compatible with PostgreSQL 11.6), Aurora PostgreSQL release 2.4 (compatible with PostgreSQL 10.11), and Aurora PostgreSQL release 1.6 (compatible with PostgreSQL 9.6.16).	February 11, 2020
Aurora PostgreSQL release 3.0	Amazon Aurora PostgreSQL release 3.0 is available and compatible with PostgreSQL 11.4. Supported AWS Regions include us-east-1, us-east-2, us-west-2, eu-west-1, ap-northeast-1, and ap-northeast-2.	November 26, 2019
Aurora PostgreSQL releases 2.3.3 and 1.5.2	Amazon Aurora PostgreSQL-Compatible Edition release 2.3.3 is available and compatible with PostgreSQL 10.7. Amazon Aurora PostgreSQL-Compatible Edition release 1.5.2 is available and compatible with PostgreSQL 9.6.12.	July 3, 2019
Aurora PostgreSQL releases 2.3.1 and 1.5.1	Amazon Aurora PostgreSQL-Compatible Edition release 2.3.1 is available and compatible with PostgreSQL 10.7. Amazon Aurora PostgreSQL-Compatible Edition release 1.5.1 is available and compatible with PostgreSQL 9.6.12.	July 2, 2019
Aurora PostgreSQL release 2.3	Release 2.3 of Amazon Aurora PostgreSQL-Compatible Edition is available and compatible with PostgreSQL 10.7.	May 30, 2019
Aurora PostgreSQL releases 1.2.2, 1.3.2, 2.0.1, 2.1.1, 2.2.1	The following patch releases for Amazon Aurora PostgreSQL-Compatible Edition are now available and include releases 1.2.2, 1.3.2, 2.0.1, 2.1.1, and 2.2.1.	May 21, 2019
Aurora PostgreSQL release 1.4	Release 1.4 of Amazon Aurora PostgreSQL-Compatible Edition is available and compatible with PostgreSQL 9.6.11.	May 9, 2019

Change	Description	Date changed
Aurora PostgreSQL release 2.2.0	Release 2.2.0 of Aurora PostgreSQL is available and compatible with PostgreSQL 10.6.	February 13, 2019
Aurora PostgreSQL version 2.1	Aurora PostgreSQL version 2.1 is available and compatible with PostgreSQL 10.5.	November 20, 2018
Aurora PostgreSQL version 2.0	Aurora PostgreSQL version 2.0 is available and compatible with PostgreSQL 10.4.	September 25, 2018
Aurora PostgreSQL version 1.3	Aurora PostgreSQL version 1.3 is now available and is compatible with PostgreSQL 9.6.9.	September 11, 2018