Heatwave Release Notes

Abstract

This document contains release notes for the changes in each release of HeatWave.

For additional HeatWave documentation, see HeatWave User Guide.

Updates to these notes occur as new product features are added, so that everybody can follow the development process. If a recent version is listed here that you cannot find on the download page (https://dev.mysql.com/downloads/), the version has not yet been released.

The documentation included in source and binary distributions may not be fully up to date with respect to release note entries because integration of the documentation occurs at release build time. For the most up-to-date release notes, please refer to the online documentation instead.

For legal information, see the Legal Notices.

For help with using MySQL, please visit the MySQL Forums, where you can discuss your issues with other MySQL users.

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Preface and Legal Notices

This document contains release notes for the changes in each release of HeatWave.

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Changes in HeatWave

Changes in HeatWave 8.0.23-u2 (2021-03-15, General Availability)
Functionality Added or Changed

- Support was added for the following aggregate functions:
  - STD()
  - STDDEV()
  - STDDEV_POP()
  - STDDEV_SAMP()
  - VAR_POP()
  - VAR_SAMP()
  - VARIANCE()

  See Aggregate Functions.

- HeatWave now uses a priority-based scheduling mechanism based on query cost estimates to schedule queries for execution. Previously, queries were executed in the order of arrival. The scheduling mechanism prioritizes short running queries over long running queries to reduce overall query execution wait times. For more information, see Query Scheduling.

Changes in HeatWave 8.0.23-u1 (2021-02-09, General Availability)

Functionality Added or Changed

- String column encoding support was added for TEXT-type columns. See Encoding String Columns.

- UNION and UNION ALL support was extended. The clauses are now supported at any location in a query that is permitted by MySQL.

- The following date and time functions are now supported:
  - TO_SECONDS()
  - UNIX_TIMESTAMP()
  - FROM_UNIXTIME()
  - TIME_TO_SEC()

  See Date and Time Functions.

The following date and time functions are now supported with VARLEN-encoded columns:

- TO_DAYS()
- DAYOFYEAR()
- QUARTER()
- TO_SECONDS()

  See Date and Time Functions.

The following string functions are now supported with VARLEN-encoded columns:

- ORD()
- ASCII()
See String Functions and Operators.

```sql
SET timezone = timezone with the timezone value specified as an offset from UTC in the form of \[H\]H:MM and prefixed with a + or – is now supported with the UNIX_TIMESTAMP() and FROM_UNIXTIME() functions.
```

- Offset is now supported with the `LIMIT` clause:

```sql
SELECT * FROM tbl LIMIT offset, row_count;
```

The PostgreSQL syntax is also supported:

```sql
SELECT * FROM tbl LIMIT row_count OFFSET offset;
```

- New Performance Schema tables provide access to query and execution statistics:

  - `performance_schema.rpd_exec_stats`
  - `performance_schema.rpd_query_stats`

Changes to HeatWave Performance Schema tables:

- An `NDV` (Number of Distinct Values) column was added to the `performance_schema.rpd_columns` table.
- A `ROWS` column that shows the total number of rows in a table was added to the `performance_schema.rpd_tables` table.
- A `MEMORY_USAGE` column that shows node memory usage was added to the `performance_schema.rpd_columns` table.
- The `performance_schema.rpd_nodes DRAM` column was renamed to `MEMORY_TOTAL`. The `MEMORY_TOTAL` column shows the total memory allocated to a HeatWave node.

See Performance Schema Tables.

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