concurrent transactions use separate rollback segments for undo logs, resulting in less resource contention.

- Default values for variables that affect buffer pool preflushing and flushing behavior were modified:
  - The `innodb_max_dirty_pages_pct_lwm` default value is now 10. The previous default value of 0 disables buffer pool preflushing. A value of 10 enables preflushing when the percentage of dirty pages in the buffer pool exceeds 10%. Enabling preflushing improves performance consistency.
  - The `innodb_max_dirty_pages_pct` default value was increased from 75 to 90. `InnoDB` attempts to flush data from the buffer pool so that the percentage of dirty pages does not exceed this value. The increased default value permits a greater percentage of dirty pages in the buffer pool.
- The default `innodb_autoinc_lock_mode` setting is now 2 (interleaved). Interleaved lock mode permits the execution of multi-row inserts in parallel, which improves concurrency and scalability. The new `innodb_autoinc_lock_mode` default setting reflects the change from statement-based replication to row based replication as the default replication type in MySQL 5.7. Statement-based replication requires the consecutive auto-increment lock mode (the previous default) to ensure that auto-increment values are assigned in a predictable and repeatable order for a given sequence of SQL statements, whereas row-based replication is not sensitive to the execution order of SQL statements. For more information, see InnoDB AUTO_INCREMENT Lock Modes.

  For systems that use statement-based replication, the new `innodb_autoinc_lock_mode` default setting may break applications that depend on sequential auto-increment values. To restore the previous default, set `innodb_autoinc_lock_mode` to 1.
- Renaming a general tablespace is supported by `ALTER TABLESPACE ... RENAME TO` syntax.
- The new `innodb_dedicated_server` variable, which is disabled by default, can be used to have `InnoDB` automatically configure the following options according to the amount of memory detected on the server:
  - `innodb_buffer_pool_size`
  - `innodb_log_file_size`
  - `innodb_flush_method`

  This option is intended for MySQL server instances that run on a dedicated server. For more information, see Section 15.8.12, “Enabling Automatic Configuration for a Dedicated MySQL Server”.
- The new `INFORMATION_SCHEMA.INNODB_TABLESPACES_BRIEF` view provides space, name, path, flag, and space type data for `InnoDB` tablespaces.
- The zlib library version bundled with MySQL was raised from version 1.2.3 to version 1.2.11. MySQL implements compression with the help of the zlib library.

  If you use `InnoDB` compressed tables, see Section 2.11.4, “Changes in MySQL 8.0” for related upgrade implications.
- Serialized dictionary information (SDI) is present in all `InnoDB` tablespace files except for global temporary tablespace and undo tablespace files. SDI is serialized metadata for table and tablespace objects. The presence of SDI data provides metadata redundancy. For example, dictionary object