

Controls index condition pushdown.

For more information, see [Section 8.2.1.6, “Index Condition Pushdown Optimization”](#).

- Index Extensions Flags

- `use_index_extensions` (default `on`)

Controls use of index extensions.

For more information, see [Section 8.3.10, “Use of Index Extensions”](#).

- Index Merge Flags

- `index_merge` (default `on`)

Controls all Index Merge optimizations.

- `index_merge_intersection` (default `on`)

Controls the Index Merge Intersection Access optimization.

- `index_merge_sort_union` (default `on`)

Controls the Index Merge Sort-Union Access optimization.

- `index_merge_union` (default `on`)

Controls the Index Merge Union Access optimization.

For more information, see [Section 8.2.1.3, “Index Merge Optimization”](#).

- Index Visibility Flags

- `use_invisible_indexes` (default `off`)

Controls use of invisible indexes.

For more information, see [Section 8.3.12, “Invisible Indexes”](#).

- Limit Optimization Flags

- `prefer_ordering_index` (default `on`)

Controls whether, in the case of a query having an `ORDER BY` or `GROUP BY` with a `LIMIT` clause, the optimizer tries to use an ordered index instead of an unordered index, a filesort, or some other optimization. This optimization is performed by default whenever the optimizer determines that using it would allow for faster execution of the query.

Because the algorithm that makes this determination cannot handle every conceivable case (due in part to the assumption that the distribution of data is always more or less uniform), there are cases in which this optimization may not be desirable. Prior to MySQL 8.0.21, it was not possible to disable this optimization, but in MySQL 8.0.21 and later, while it remains the default behavior, it can be disabled by setting the `prefer_ordering_index` flag to `off`.

For more information and examples, see [Section 8.2.1.19, “LIMIT Query Optimization”](#).

- Multi-Range Read Flags