• NO_ZERO_DATE

The NO_ZERO_DATE mode affects whether the server permits '0000-00-00' as a valid date. Its effect also depends on whether strict SQL mode is enabled.

- If this mode is not enabled, '0000-00-00' is permitted and inserts produce no warning.
- If this mode is enabled, '0000-00-00' is permitted and inserts produce a warning.
- If this mode and strict mode are enabled, '0000-00-00' is not permitted and inserts produce an error, unless IGNORE is given as well. For INSERT IGNORE and UPDATE IGNORE, '0000-00-00' is permitted and inserts produce a warning.

NO_ZERO_DATE is deprecated. NO_ZERO_DATE is not part of strict mode, but should be used in conjunction with strict mode and is enabled by default. A warning occurs if NO_ZERO_DATE is enabled without also enabling strict mode or vice versa.

Because NO_ZERO_DATE is deprecated, you should expect it to be removed in a future MySQL release as a separate mode name and its effect included in the effects of strict SQL mode.

• NO_ZERO_IN_DATE

The NO_ZERO_IN_DATE mode affects whether the server permits dates in which the year part is nonzero but the month or day part is 0. (This mode affects dates such as '2010-00-01' or '2010-01-00', but not '0000-00-00'. To control whether the server permits '0000-00-00', use the NO_ZERO_DATE mode.) The effect of NO_ZERO_IN_DATE also depends on whether strict SQL mode is enabled.

- If this mode is not enabled, dates with zero parts are permitted and inserts produce no warning.
- If this mode is enabled, dates with zero parts are inserted as '0000-00-00' and produce a warning.
- If this mode and strict mode are enabled, dates with zero parts are not permitted and inserts produce an error, unless IGNORE is given as well. For INSERT IGNORE and UPDATE IGNORE, dates with zero parts are inserted as '0000-00-00' and produce a warning.

NO_ZERO_IN_DATE is deprecated. NO_ZERO_IN_DATE is not part of strict mode, but should be used in conjunction with strict mode and is enabled by default. A warning occurs if NO_ZERO_IN_DATE is enabled without also enabling strict mode or vice versa.

Because NO_ZERO_IN_DATE is deprecated, you should expect it to be removed in a future MySQL release as a separate mode name and its effect included in the effects of strict SQL mode.

• ONLY_FULL_GROUP_BY

Reject queries for which the select list, HAVING condition, or ORDER BY list refer to nonaggregated columns that are neither named in the GROUP BY clause nor are functionally dependent on (uniquely determined by) GROUP BY columns.

A MySQL extension to standard SQL permits references in the HAVING clause to aliased expressions in the select list. The HAVING clause can refer to aliases regardless of whether ONLY_FULL_GROUP_BY is enabled.

For additional discussion and examples, see Section 12.20.3, "MySQL Handling of GROUP BY".