

the `TABLESPACE [=] innodb_system` table option with `CREATE TABLE` or `ALTER TABLE`. The `innodb_file_per_table` variable is not applicable to general tablespaces, nor is it applicable when using the `TABLESPACE [=] innodb_system` table option to store `DYNAMIC` tables in the system tablespace.

DYNAMIC Row Format Storage Characteristics

The `DYNAMIC` row format is a variation of the `COMPACT` row format. For storage characteristics, see [COMPACT Row Format Storage Characteristics](#).

COMPRESSED Row Format

The `COMPRESSED` row format offers the same storage characteristics and capabilities as the `DYNAMIC` row format but adds support for table and index data compression.

The `COMPRESSED` row format uses similar internal details for off-page storage as the `DYNAMIC` row format, with additional storage and performance considerations from the table and index data being compressed and using smaller page sizes. With the `COMPRESSED` row format, the `KEY_BLOCK_SIZE` option controls how much column data is stored in the clustered index, and how much is placed on overflow pages. For more information about the `COMPRESSED` row format, see [Section 15.9, “InnoDB Table and Page Compression”](#).

The `COMPRESSED` row format supports index key prefixes up to 3072 bytes.

Tables that use the `COMPRESSED` row format can be created in file-per-table tablespaces or general tablespaces. The system tablespace does not support the `COMPRESSED` row format. To store a `COMPRESSED` table in a file-per-table tablespace, the `innodb_file_per_table` variable must be enabled. The `innodb_file_per_table` variable is not applicable to general tablespaces. General tablespaces support all row formats with the caveat that compressed and uncompressed tables cannot coexist in the same general tablespace due to different physical page sizes. For more information, see [Section 15.6.3.3, “General Tablespaces”](#).

Compressed Row Format Storage Characteristics

The `COMPRESSED` row format is a variation of the `COMPACT` row format. For storage characteristics, see [COMPACT Row Format Storage Characteristics](#).

Defining the Row Format of a Table

The default row format for InnoDB tables is defined by `innodb_default_row_format` variable, which has a default value of `DYNAMIC`. The default row format is used when the `ROW_FORMAT` table option is not defined explicitly or when `ROW_FORMAT=DEFAULT` is specified.

The row format of a table can be defined explicitly using the `ROW_FORMAT` table option in a `CREATE TABLE` or `ALTER TABLE` statement. For example:

```
CREATE TABLE t1 (c1 INT) ROW_FORMAT=DYNAMIC;
```

An explicitly defined `ROW_FORMAT` setting overrides the default row format. Specifying `ROW_FORMAT=DEFAULT` is equivalent to using the implicit default.

The `innodb_default_row_format` variable can be set dynamically:

```
mysql> SET GLOBAL innodb_default_row_format=DYNAMIC;
```

Valid `innodb_default_row_format` options include `DYNAMIC`, `COMPACT`, and `REDUNDANT`. The `COMPRESSED` row format, which is not supported for use in the system tablespace, cannot be defined as