- `fsync` operations are performed on multiple file-per-table data files instead of a single shared tablespace data file. Because `fsync` operations are per file, write operations for multiple tables cannot be combined, which can result in a higher total number of `fsync` operations.
- `mysqld` must keep an open file handle for each file-per-table tablespace, which may impact performance if you have numerous tables in file-per-table tablespaces.
- More file descriptors are required when each table has its own data file.
- There is potential for more fragmentation, which can impede `DROP TABLE` and table scan performance. However, if fragmentation is managed, file-per-table tablespaces can improve performance for these operations.
- The buffer pool is scanned when dropping a table that resides in a file-per-table tablespace, which can take several seconds for large buffer pools. The scan is performed with a broad internal lock, which may delay other operations.
- The `innodb_autoextend_increment` variable, which defines the increment size for extending the size of an auto-extending shared tablespace file when it becomes full, does not apply to file-per-table tablespace files, which are auto-extending regardless of the `innodb_autoextend_increment` setting. Initial file-per-table tablespace extensions are by small amounts, after which extensions occur in increments of 4MB.

15.6.3.3 General Tablespaces

A general tablespace is a shared `InnoDB` tablespace that is created using `CREATE TABLESPACE` syntax. General tablespace capabilities and features are described under the following topics in this section:

- General Tablespace Capabilities
- Creating a General Tablespace
- Adding Tables to a General Tablespace
- General Tablespace Row Format Support
- Moving Tables Between Tablespaces Using ALTER TABLE
- Renaming a General Tablespace
- Dropping a General Tablespace
- General Tablespace Limitations

General Tablespace Capabilities

General tablespaces provide the following capabilities:

- Similar to the system tablespace, general tablespaces are shared tablespaces capable of storing data for multiple tables.
- General tablespaces have a potential memory advantage over file-per-table tablespaces. The server keeps tablespace metadata in memory for the lifetime of a tablespace. Multiple tables in fewer general tablespaces consume less memory for tablespace metadata than the same number of tables in separate file-per-table tablespaces.
- General tablespace data files can be placed in a directory relative to or independent of the MySQL data directory, which provides you with many of the data file and storage management capabilities of file-per-