Tablespaces

A common paradigm for optimizing performance in database systems is the use of tablespaces to organize disk layout.

> **Warning:** Django does not create the tablespaces for you. Please refer to your database engine's documentation for details on creating and managing tablespaces.

Declaring tablespaces for tables

A tablespace can be specified for the table generated by a model by supplying the `db_tablespace` option inside the model's `class Meta`. This option also affects tables automatically created for `ManyToManyField`s in the model.

You can use the `DEFAULT_TABLESPACE` setting to specify a default value for `db_tablespace`. This is useful for setting a tablespace for the built-in Django apps and other applications whose code you cannot control.

Declaring tablespaces for indexes

You can pass the `db_tablespace` option to an `Index` constructor to specify the name of a tablespace to use for the index. For single field indexes, you can pass the `db_tablespace` option to a `Field` constructor to specify an alternate tablespace for the field's column index. If the column doesn't have an index, the option is ignored.

You can use the `DEFAULT_INDEX_TABLESPACE` setting to specify a default value for `db_tablespace`.

If `db_tablespace` isn't specified and you didn't set `DEFAULT_INDEX_TABLESPACE`, the index is created in the same tablespace as the tables.

An example

```
class TablespaceExample(models.Model):
    name = models.CharField(max_length=30, db_index=True, db_tablespace="indexes")
    data = models.CharField(max_length=255, db_index=True)
    shortcut = models.CharField(max_length=7)
    edges = models.ManyToManyField(to="self", db_tablespace="indexes")

    class Meta:
        db_tablespace = "tables"
        indexes = [models.Index(fields=["shortcut"], db_tablespace="other_indexes")]
```

In this example, the tables generated by the `TablespaceExample` model (i.e. the model table and the many-to-many table) would be stored in the `tables` tablespace. The index for the name field and the indexes on the many-to-many table would be stored in the `indexes` tablespace. The `data` field would also generate an index, but no tablespace for it is specified, so it would be stored in the model tablespace `tables` by default. The index for the `shortcut` field would be stored in the `other_indexes` tablespace.

Database support

PostgreSQL and Oracle support tablespaces. SQLite, MariaDB and MySQL don't.

When you use a backend that lacks support for tablespaces, Django ignores all tablespace-related options.