### PostgreSQL CREATE DATABASE statement

To create a new PostgreSQL database, you use CREATE DATABASE statement as shown below:

```
CREATE DATABASE db_name

OWNER = role_name

TEMPLATE = template

ENCODING = encoding

LC_COLLATE = collate

LC_CTYPE = ctype

TABLESPACE = tablespace_name

CONNECTION LIMIT = max_concurrent_connection
```

The CREATE DATABASE statement provides you with various options when creating a new database. Let's examine those options in more detail:

- **db\_name**: is the name of the new database that you want to create. The database name must be unique in the PostgreSQL database server. If you try to create a new database that has the same name as an existing database, PostgreSQL will issue an error.
  - role\_name: is the role name of the user who will own the new database.

    PostgreSQL uses user's role name who executes the CREATE DATABASE statement as the default role name.
- template: is the name of the database template from which the new database creates. PostgreSQL allows you to create a database based on a template database. The template1 is the default template database.
- **encoding**: specifies the character set encoding for the new database. By default, it is the encoding of the template database.
- collate: specifies a collation for the new database. The collation specifies the sort order of strings that affect the result of the ORDER BY clause in the SELECT

<u>statement</u>. The template database's collation is the default collation for the new database if you don't specify it explicitly in the LC COLLATE parameter.

- **ctype**: specifies the character classification for the new database. The <a href="ctype">ctype</a> affects the categorization e.g., digit, lower and upper. The default is the character classification of the template database.
- **tablespace\_name**: specifies the <u>tablespace\_name</u> for the new database. The default is the template database's tablespace.
- max\_concurrent\_connection: specifies the maximum concurrent connections to the new database. The default is -1 i.e., unlimited. This feature is very useful in the shared hosting environments where you can configure the maximum concurrent connections for a particular database.

#### PostgreSQL create database examples

CREATE DATABASE testdb1;

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# PostgreSQL CREATE DATABASE

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**Summary**: in this tutorial, you will learn how to create new databases with various options by using the **PostgreSQL CREATE DATABASE** statement.

### Introduction to PostgreSQL CREATE DATABASE statement

To create a new PostgreSQL database, you use CREATE DATABASE statement as shown below: 1 CREATE DATABASE db\_name

- 2 OWNER = role name
- 3 TEMPLATE = template
- 4 ENCODING = encoding
- 5 LC\_COLLATE = collate
- 6 LC\_CTYPE = ctype

```
7 TABLESPACE = tablespace_name
```

8 CONNECTION LIMIT = max\_concurrent\_connection

The CREATE DATABASE statement provides you with various options when creating a new database. Let's examine those options in more detail:

- **db\_name**: is the name of the new database that you want to create. The database name must be unique in the PostgreSQL database server. If you try to create a new database that has the same name as an existing database, PostgreSQL will issue an error.
- **role\_name**: is the role name of the user who will own the new database. PostgreSQL uses user's role name who executes the CREATE DATABASE statement as the default role name.
- **template**: is the name of the database template from which the new database creates. PostgreSQL allows you to create a database based on a template database. The template1 is the default template database.
- **encoding**: specifies the character set encoding for the new database. By default, it is the encoding of the template database.
- **collate:** specifies a collation for the new database. The collation specifies the sort order of strings that affect the result of the <u>ORDER BY</u> clause in the <u>SELECT statement</u>. The template database's collation is the default collation for the new database if you don't specify it explicitly in the <u>LC COLLATE</u> parameter.
- **ctype**: specifies the character classification for the new database. The <a href="ctype">ctype</a> affects the categorization e.g., digit, lower and upper. The default is the character classification of the template database.
- **tablespace\_name**: specifies the <u>tablespace\_name</u> for the new database. The default is the template database's tablespace.
- max\_concurrent\_connection: specifies the maximum concurrent connections to the new database. The default is -1 i.e., unlimited. This feature is very useful in the shared hosting environments where you can configure the maximum concurrent connections for a particular database.

Besides the CREATE DATABASE statement, you can also use the createdb program to create a new database. The createdb program uses CREATE DATABASE statement behind the scenes.

## PostgreSQL create database examples

The simplest way to create a new database is to use all default settings and only specify the database name as the following query:

1 CREATE DATABASE testdb1;

<u>Create Database</u> – creates a new database using CREATE DATABASE statement.

PostgreSQL created a new database named <a href="testdb1">testdb1</a> that has default parameters from the default template database i.e., <a href="template1">template1</a>.

The following statement creates a new database name hrdb with the following parameters:

- Encoding: utf-8.
- Owner: hr, with the assumption that the hr user exists in the database server.
- Maximum concurrent connections: 25.

CREATE DATABASE hrdb WITH ENCODING='UTF8' OWNER=hr CONNECTION LIMIT=25;