

Lab 11: Running Application using CockroachDB

- Create a CockroachDB Serverless cluster
- Create a SQL user
- Connect to the cluster
- Configure the connection environment variable
- Run the Node.js sample code

This lab shows you how to use the `CockroachDB Cloud Console` to create a CockroachDB Serverless cluster and then insert and read some sample data from a Java or Node.js sample application.

Create a CockroachDB Serverless cluster

Note: Organizations without billing information on file can only create one CockroachDB Serverless cluster.

1. If you haven't already, sign up for a CockroachDB Cloud account.
2. `Log in` to your CockroachDB Cloud account.
3. On the **Clusters** page, click **Create Cluster**.
4. On the **Create your cluster** page, select **Serverless**.
5. Click **Create cluster**.

Your cluster will be created in a few seconds and the **Create SQL user** dialog will display.

Create a SQL user

The **Create SQL user** dialog allows you to create a new SQL user and password.

1. Enter a username in the **SQL user** field or use the one provided by default.
2. Click **Generate & save password**.
3. Copy the generated password and save it in a secure location.
4. Click **Next**.

Currently, all new SQL users are created with admin privileges.

Connect to the cluster

Select a language to connect a sample application to your cluster.

Once you create a SQL user, the **Connect to cluster** dialog will show information about how to connect to your cluster.

1. Select **General connection string** from the **Select option** dropdown.
2. Open the **General connection string** section, then copy the connection string provided and save it in a secure location.

This Quickstart uses default certificates, so you can skip the Download CA Cert instructions.

Note:

The connection string is pre-populated with your username, password, cluster name, and other details. Your password, in particular, will be provided *only* once. Save it in a secure place (Cockroach Labs recommends a password manager) to connect to your cluster in the future. If you forget your password, a Cluster Administrator can reset it.

Configure the connection environment variable

In a terminal set the `DATABASE_URL` environment variable to the connection string:

```
export DATABASE_URL="<connection-string>"
```

The code sample uses the connection string stored in the environment variable `DATABASE_URL` to connect to your cluster.

Run the Node.js sample code

1. Clone the `quickstart-code-samples` repo:

```
git clone https://github.com/fenago/quickstart-code-samples
```

2. Navigate to the `node` directory of the repo:

```
cd quickstart-code-samples/node
```

The code sample in this directory does the following:

1. Connects to CockroachDB Cloud with the `node-postgres driver` using the connection string set in the `DATABASE_URL` environment variable.
2. Creates a table.
3. Inserts some data into the table.
4. Reads the inserted data.
5. Prints the data to the terminal.

3. Install the app requirements:

```
npm install
```

4. Run the app:

```
node app.js
```

The output will look like this:

```
Hello world!
```