Using MySQL with Cloud9

This article explains our first iteration of MySQL support in Cloud9. It makes it super easy to install, start and stop a MySQL instance right in your workspace. The nice thing is that every workspace will run a separate database so your projects will never interfere with each other. You can control MySQL with the `mysql-ctl` command line tool run from the terminal:

```
# start MySQL. Will create an empty database on first start
$ mysql-ctl start


# stop MySQL
$ mysql-ctl stop


# run the MySQL interactive shell
$ mysql-ctl cli
```

You can then connect to the database with following parameters:

- Hostname - `$IP` (The same local IP as the application you run on Cloud9)
- Port - `3306` (The default MySQL port number)
- User - `$C9_USER` (Your Cloud9 user name)
- Password - "" (No password since you can only access the DB from within the workspace)
- Database - `c9` (The database username)

To verify your hostname, you can connect to the mysql cli and show the host by running the following commands:

```
mysql-ctl cli
```

Once connected to the mysql shell, run the following:

```
select @@hostname;
```

Selecting your database

```
mysql> use c9;
mysql> show tables;
```

Creating a table in your database

Enter the command that follows to create a table in your database. In this table the user ID number of a user serves as the primary key. Each model ID number is correlated with its first and last name.

```
mysql> CREATE TABLE names (
-> user_id INT UNSIGNED NOT NULL AUTO_INCREMENT,
-> firstName VARCHAR(128),
-> lastName VARCHAR(128),
-> PRIMARY KEY (user_id));
```

You now perform your first query of the database. As you saw in the last activity, a query is used to extract data or rows from a database. Type `SELECT * FROM names;`. The `*` in the command is a wildcard and, as in a Google search query, means to match any string. What does MySQL display?

Adding data to your table

```
mysql> insert into names(firstName, lastName) values ('Gene', 'Haynes');
```