

# Database Lab

Saturday, October 9, 2021 11:53 AM

<https://phoenixnap.com/kb/mysql-docker-container>

```
mysqld --help --verbose | grep '/etc'
```

Set config in /home/sysadmin/docker/mysqlserver/conf.d/my.cnf (for mysql/mysql-server)

```
docker run -d --name=mysqlserver -e="MYSQL_ROOT_PASSWORD=password123" -p 6603:3306 -v=/home/sysadmin/docker/mysqlserver/conf.d:/etc/mysql/ mysql/mysql-server
```

```
docker exec -it mysqlserver /bin/bash
```

Check contents of /var/lib/mysql

Remove container and readd:

```
docker run -d --name=mysqlserver -e="MYSQL_ROOT_PASSWORD=password123" -p 6603:3306 -v=/home/sysadmin/docker/mysqlserver/conf.d:/etc/mysql/ -v=/home/sysadmin/storage/docker/mysql-data:/var/lib/mysql mysql/mysql-server
```

```
docker run -d --name=mysqlserver-alt -e="MYSQL_ROOT_PASSWORD=password123" -p 6604:3306 -v=/home/sysadmin/docker/mysqlserver/conf.d:/etc/mysql/ -v=/home/sysadmin/storage/docker/mysql-data:/var/lib/mysql mysql/mysql-server
```

Show max\_connections in both

Show data changes in both

```
mysql -uroot -ppassword123 -hlocalhost -P6603 -e 'show global variables like "max_connections";
```

```
mysql -uroot -ppassword123 -hlocalhost -P6603
```

create database stuff;

use stuff;

```
create table things (Id INT NOT NULL PRIMARY KEY AUTO_INCREMENT,
                    Name varchar(25) NOT NULL,
                    Description varchar(50) NULL);
```

```
INSERT INTO things (Name, Description) VALUES ('Widget', 'Just a regular thing');
```

```
INSERT INTO things (Name, Description) VALUES ('Whatchamacallit', 'AKA a candy bar');
```

```
INSERT INTO things (Name, Description) VALUES ('Hoozywhatzit', 'Not sure where to start');
```

```
SELECT * FROM things;
```

Take first one down and stand up new one:

```
docker run -d --name=mysqlserver-alt -e="MYSQL_ROOT_PASSWORD=password123" -p 6604:3306 -v=/home/sysadmin/docker/mysqlserver/conf.d:/etc/mysql/ -v=/home/sysadmin/storage/docker/mysql-data:/var/lib/mysql mysql/mysql-server
```

```
docker exec -it mysqlserver-alt /bin/bash
```

Show max connections

Show table data