

# Handbook of commands / queries used for configuring MySQL for our email server

In the handbook examples, we will assume that you have a bakery named CheezeKake and are configuring a self-hosted email service for its domain cheezekake.com, with email addresses of the form @cheezekake.com.

1. Install MySQL server.

```
sudo apt install mysql-server
```

2. Enter MySQL for the first time as root.

```
sudo mysql -u root
```

3. Create a new database for our email server.

```
create database cheezekakemail;
```

4. Create a new database user named cheezekakeadmin and hand off the cheezekakemail database privileges to that user.

```
grant all privileges on cheezekakemail.* to 'cheezekakeadmin'@'localhost'  
identified by 'ch3353k@k3';
```

```
flush privileges;
```

5. Log into MySQL as the new user

```
mysql -u cheezekakeadmin -p cheezekakemail
```

Enter the password 'ch3353k@k3'.

6. Create the table for domain names.

```
create table domains (  
id int(2) not null auto_increment,  
name varchar(32) not null,  
primary key(id)  
);
```

7. Create the table for email addresses.

```
create table users (  
id int(4) not null auto_increment,  
domain_id int(2) not null,  
password varchar(106) not null,  
email varchar(32) not null,  
primary key(id),  
unique key email (email),  
foreign key (domain_id) references domains(id) on delete cascade  
);
```

8. Create the table for aliases.

```
create table aliases(  
id int(3) not null auto_increment,  
domain_id int(2) not null,  
source varchar(32) not null,  
destination varchar(32) not null,  
primary key(id),  
foreign key(domain_id) references domains(id) on delete cascade  
);
```

9. Create your domain records. We assume that you will be supporting emails for addresses in the form @cheezekake.com

```
insert into domains(name) values('cheezekake.com');
```

10. Create your email addresses.

```
insert into users(domain_id, email, password) values(1, 'henry@cheezekake.com',  
encrypt('h3nry', concat('$6$', substring sha(rand()), -16)));
```

11. Create your aliases.

```
insert into aliases(domain_id, source, destination) values(1,  
'admin@cheezekake.com', 'henry@cheezekake.com');
```

12. List your created records.

```
select * from domains;  
select * from users;  
select * from aliases;
```