

Handbook of instructions for configuring Postfix to use MySQL

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.

We are assuming that you have an Ubuntu machine with the IP address 20.227.211.113, where you have installed MySQL and Postfix.

1. Create the file /etc/postfix/domains.cf with the following contents.

```
user = cheezekakeadmin
password = ch3353k@k3
hosts = 127.0.0.1
dbname = cheezekakemail
query = SELECT 1 FROM domains WHERE name = '%s'
```

2. Create the file /etc/postfix/users.cf with the following contents.

```
user = cheezekakeadmin
password = ch3353k@k3
hosts = 127.0.0.1
dbname = cheezekakemail
query = SELECT 1 FROM users WHERE email = '%s'
```

3. Create the file /etc/postfix/aliases.cf with the following contents.

```
user = cheezekakeadmin
password = ch3353k@k3
hosts = 127.0.0.1
dbname = cheezekakemail
query = SELECT destination FROM aliases WHERE source = '%s'
```

4. Create the file /etc/postfix/email-to-email.cf with the following contents.

```
user = cheezekakeadmin
password = ch3353k@k3
hosts = 127.0.0.1
dbname = cheezekakemail
query = SELECT email FROM users WHERE email = '%s'
```

5. Verify that the above four files are configured correctly.

```
postmap -q cheezekake.com mysql:/etc/postfix/domains.cf
postmap -q henry@cheezekake.com mysql:/etc/postfix/users.cf
postmap -q admin@cheezekake.com mysql:/etc/postfix/aliases.cf
postmap -q henry@cheezekake.com mysql:/etc/postfix/email-to-email.cf
```

6. Make a copy of the /etc/postfix/main.cf in preparation for making changes.

```
sudo cp /etc/postfix/main.cf //etc/postfix/main-basic.cf
```

7. Add the following lines to the /etc/postfix/main.cf

```
virtual_mailbox_domains = mysql:/etc/postfix/domains.cf
virtual_mailbox_maps = mysql:/etc/postfix/users.cf
virtual_alias_maps = mysql:/etc/postfix/aliases.cf, mysql:/etc/postfix/email-to-
email.cf
```

8. Remove the values ‘\$myhostname’ and ‘cheezekake.com’ from mydestination. Save the file.

9. Verify that the installation of Postfix created a directory named /var/mail. The directory should belong to user ‘root’, but group ‘mail’. It should also be writeable by the group ‘mail’.

```
ls -ald /var/mail
```

10. Verify that there is a group named mail. Note down the group’s numeric ID (third column).

```
getent group mail
```

11. Verify that there is a user named mail. The user’s group ID (fourth column) should be same as the value shown by the previous command. The user’s home directory should be /var/mail (sixth column).

```
getent passwd mail
```

12. Add the following lines to the end of /etc/postfix/main.cf

```
virtual_mailbox_base = /var/mail
virtual_minimum_uid = 4
virtual_uid_maps = static:<Number from the third column of point 11>
virtual_gid_maps = static:<Number from the fourth column of point 11>
```

13. Save the file and reload Postfix

```
sudo systemctl reload postfix
```

14. Start the mail logs

```
sudo tail -f /var/log/mail.log &
```

15. Send a mail from Gmail.com to henry@cheezekake.com

16. The logs should show a line `status = sent (delivered to mailbox)`.

17. Verify that the mail is in the file /var/mail/1.