Handbook of instructions for configuring Dovecot

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. Install Dovecot and supporting modules

```
sudo apt install dovecot-core dovecot-imapd dovecot-lmtpd dovecot-mysql
```

2. In the file //etc/dovecot/dovecot.conf

a. Remove ‘pop’ from the line
```
protocols = ....
```

b. Add the following 4 lines anywhere inside the file.

```
mail_uid = mail
mail_gid = mail
mail_home = /var/mail/%d/%n
first_valid_uid = 4
```

3. In the file //etc/dovecot/conf.d/10-mail.conf, change the value of mail_location to the following.
```
mail_location = maildir:/var/mail/%d/%n
```

4. Create a directory named cheezekake.com inside //var/mail. The directory should belong to cheezekake.com.

```
sudo mkdir -p //var/mail/cheezekake.com
sudo chown -R mail:mail //var/mail/cheezekake.com
```

5. In the file //etc/dovecot/conf.d/10-auth.conf

a. Change the value of disable_plaintext_auth

```
disable_plaintext_auth = no
```

6. Add ‘plain’ as one of the options in auth_mechanisms

```
auth_mechanisms = <existing values> plain
```

7. Enable SQL authentication and disable operating system authentication.

```
#!include auth-system.conf.ext
!include auth-sql.conf.ext
```

8. In the file /etc/dovercot/conf.d/auth-sql.conf.ext

a. Leave the passdb section to use driver = sql and args as dovecot-sql.conf.ext

b. But for userdb, comment the entire section that contains driver=mysql and uncomment the section that contains driver=static.

```
#userdb {
#     driver = sql
#     args = /etc/dovecot/dovecot-sql.conf.ext
#}
```

```
userdb {
      driver = static
      args = uid=mail gid=mail home=/additional/mail/%d/%n
}
```

9. In the file //etc/dovecot/dovecot-sql.conf

a. Set the value of driver to mysql.

```
driver = mysql
```

b. Set the value of connect to reflect your database.

```
connect = host=localhost dbname=cheezekakemail user=cheezekakeadmin
password=ch33z3k@k3
```

c. Set password scheme to be SHA512-CRYPT

```
default_pass_scheme = SHA512-CRYPT
```

d. Set the value of password_query as follows.

```
password_query = \
      SELECT email, password \
      FROM users WHERE email = '%u'
```

10. In the file //etc/dovecot/conf.d/10-master.conf,

a. Ensure that IMAP protocol is started on port 143.

```
service imap-login {
      inet_listener imap {
            port = 143
      }
      ... other lines ...
}
```

b. Configure the LMTP service to use a socket file within Postfix's running directory.

```
service lmtp {
      unix_listener /var/spool/postfix/private/dovecot-lmtp {
            mode = 0600
            user = postfix
            group = postfix
      }
}
```

c. Create two more listeners inside auth service that allow Postfix to authenticate through Dovecot.

```
service auth {
      ... other lines ...
      unix_listener auth-userdb {
            mode = 0600
            user = mail
      }
      unix_listener /var/spool/postfix/private/auth {
            mode = 0666
            user = postfix
            group = postfix
```

```
      }
      ... other lines ...
      user = dovecot
}
```

d. Inside the service auth-worker, the value of the user field should be changed to ‘mail’.

```
service auth-worker {
      ... other lines ...
      user = mail
}
```

11. Restart Dovecot

```
sudo systemctl restart dovecot
```

12. In //etc/postfix/main.cf, add the following line.

```
virtual_transport = lmtp:unix:private/dovecot-lmtp
```

13. Remove the lines that set virtual_mailbox_base, virtual_minimum_uid, virtual_uid_maps and virtual_gid_maps.

14. Restart Postfix

```
sudo systemctl restart postfix
```

15. Telnet into our Dovecot server.

```
telnet localhost 143
```

16. At the prompt offered by Dovecot on the telnet command, login as user Henry.

```
1 login henry@cheezekake.com h3nry
```

17. Issue the following command to select the user’s Inbox folder.

```
2 select inbox
```

If there are no emails sent to Henry, the reponse may show ‘0 exists’.

18. Send an email from Gmail to henry@cheezekake.com.

19. At the telnet prompt, issue the select command again.

```
2 select inbox
```

This time the number of mails should have incremented by 1.

20. Fetch the contents of the email at the top of the list.

```
4 fetch 1 all
```

You should see the date, time, sender’s address and the mail’s subject.