

# Dovecot – server for pop and imap

Angel Bisamaza  
For Afnog 2010

# What is Dovecot?

- High-performance POP and IMAP server
- Developed by Timo Sirainen
- Unlike say UW IMAP it wasn't written in the 80s
- Transparently indexes mailbox contents (Why is this important?)
- Supports both mbox and maildir formats
- Capable of operating in an environment with minimal locking. (Why is this important)
- Graceful around failures (index repair for example)

# Let's install it the FreeBSD way

- `cd /usr/ports/mail/dovecot`
- `make`
- **Note all the options for databases!**
  - It is typical for small applications to do authentication of users using the unix password file or PAM.
  - Big mail installations can use an SQL database interface for the storage of user credentials.
- **Select Mysql options for this exercise**

Options for dovecot 1.2.4\_1

- |                                     |                    |                          |
|-------------------------------------|--------------------|--------------------------|
| <input checked="" type="checkbox"/> | <b>KQUEUE</b>      | <b>kqueue(2) support</b> |
| <input checked="" type="checkbox"/> | <b>SSL</b>         | SSL support              |
| <input checked="" type="checkbox"/> | <b>IPV6</b>        | IPv6 support             |
| <input checked="" type="checkbox"/> | <b>POP3</b>        | POP3 support             |
| <input checked="" type="checkbox"/> | <b>LDA</b>         | LDA support              |
| <input checked="" type="checkbox"/> | <b>MANAGESIEVE</b> | ManageSieve support      |
| <input type="checkbox"/>            | <b>GSSAPI</b>      | GSSAPI support           |
| <input type="checkbox"/>            | <b>VPOPMAIL</b>    | VPopMail support         |
| <input type="checkbox"/>            | <b>BDB</b>         | BerkleyDB support        |
| <input type="checkbox"/>            | <b>LDAP</b>        | OpenLDAP support         |
| <input type="checkbox"/>            | <b>PGSQL</b>       | PostgreSQL support       |
| <input checked="" type="checkbox"/> | <b>MYSQL</b>       | MySQL support            |
| <input type="checkbox"/>            | <b>SQLITE</b>      | SQLite support           |

# FreeBSD install cont

- `make install`
- **Take a look at**  
`/usr/local/etc/rc.d/dovecot`
- **Edit /etc/rc.conf**
- `dovecot_enable="YES"`
- Ok, now we could start it but we really need to configure it first.
- Look at `/usr/local/etc/dovecot.conf`

# Dovecot Configuration

- Find the lines:
  - `#ssl_cert_file = /etc/ssl/certs/dovecot.pem`
  - `#ssl_key_file = /etc/ssl/private/dovecot.pem`
- Uncomment them, Then amend them to point at the certificate and keyfile that we created during the apache webserver tutorial.
- Disable plaintext authentication by altering:
  - `disable_plaintext_auth = no`
  - Note: unencrypted connections can still be made

# Dovecot Configuration 2

- Note that the default listening services are:
  - `protocols = imap imaps pop3 pop3s`
  - TCP listeners are on 110 143 993 and 995
  - If you need the unencrypted versions of the protocol for some reason (e.g. a webmail application) then you should firewall them off from the rest of your end users (end-user clients should never be allowed to connect insecurely)
  - Otherwise disable `imap` and `pop3`
  - remove ***managesieve***

# Dovecot Configuration – mailbox location

- Locate the line:
  - `mail_location = mbox:~/mail/:INBOX=/var/mail/%u`
  - Read the section above it...
  - Replace it with:
    - `mail_location = maildir:~/Maildir`
- Ok we should have a sufficiently tuned dovecot to be able to start it.
- `/usr/local/etc/rc.d/dovecot start`



# Basic test

- If everything works correctly you should be able to point an imap client towards your system at port 993.
- ***telnet to local host port 110***
- ***user afnog <enter>***
- ***pass afnog <enter>***

# Adding Mysql Authentication

Edit the dovecot config file and make the following changes.

```
vi /usr/local/etc/dovecot.conf
```

Comment the following to disable PAM Authentication.

```
#passdb pam
```

```
#args = session=yes dovecot
```

```
#}
```

Uncomment the following line

```
passdb sql {
```

```
    args = /usr/local/etc/dovecot-sql.conf
```

```
}
```

Uncomment Static

```
userdb static {
```

```
args = uid=1001 gid=1001 home=/var/mail/%n
```

# Cont'd ...

Copy the following file:

```
/usr/local/share/examples/dovecot/dovecot-sql.conf
```

```
to /usr/local/etc/dovecot-sql.conf
```

Edit dovecot-sql.conf with the following

```
vi /usr/local/etc/dovecot-sql.conf
```

Search for the following and make the changes as highlighted

```
driver = mysql
```

```
default_pass_scheme = PLAIN
```

```
connect = host=127.0.0.1 dbname=radius user=root password=afnog
```

Add the following at the end of the file

```
password_query = SELECT value AS password FROM radcheck WHERE  
username = '%n'
```

# Test Installation

Test with users created in the Radius DB

Note that the user must have received an email before for the home directory to be create

Use the telnet option to test for authentication