

Operation Sheet 4.1: Linux Email Server

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Required Software:

- **Linux Server (Ubuntu)**
 - Postfix**
- **Dovecot**
- **Squirrelmail (email client)**

Procedure:

Postfix is a mail transfer agent (MTA) which is the responsible software for delivering & receiving emails, it's essential in order to create a complete mail server.

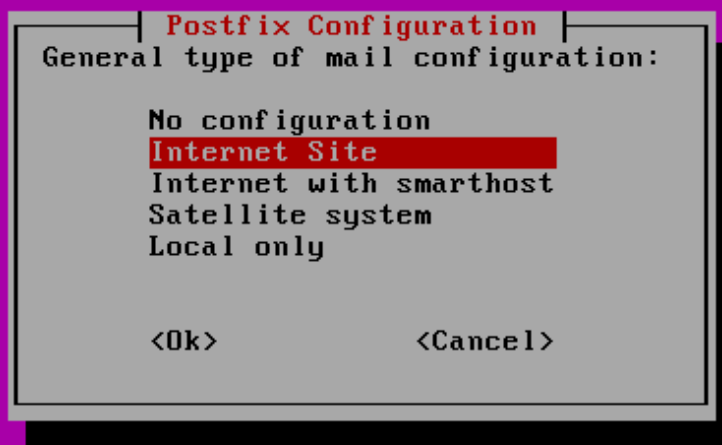
Step 1: Install postfix in linux server

```
sudo apt-get install postfix
```

or if you have installed already, reconfigure postfix with the command:

```
sudo dpkg-reconfigure postfix
```

Step 2: Choose the domain site we're going to choose "Internet Site" because the description is the best match for our server. Next, you will be asked for the Fully Qualified Domain Name (FQDN) for your server. This is your full domain name (e.g. **mail.Example.com**). Technically, a FQDN is required to end with a dot, but Postfix does not need this. So we can just enter it like:



Step 3: Configure Postfix We are going to need to change some basic settings in the main Postfix configuration file. Begin by opening this file with root privileges in your text editor:

```
sudo nano /etc/postfix/main.cf
```

Step 4: First, we need to find the myhostname parameter. During the configuration, the FQDN we selected was added to the mydestination parameter, but myhostname remained set to localhost. We want to point this to our FQDN too:

```
myhostname = mail.example.com
```

Step 5: **Configure Additional Email Addresses**

We can configure additional email addresses by creating aliases. These aliases can be used to deliver mail to other user accounts on the system.

If you wish to utilize this functionality, make sure that you configured the virtual_alias_maps directive like we demonstrated above. We will use this file to configure our address mappings. Create the file by typing:

```
sudo nano /etc/postfix/virtual
```

In this file, you can specify emails that you wish to create on the left-hand side, and username to deliver

the mail to on the right-hand side, like this:

```
admin@example.com administrator  
user1@example.com user1
```

Save and close the file when you are finished.

Step 6 : Now, we can implement our mapping by calling this command:

```
sudo postmap /etc/postfix/virtual
```

Step 7: Now, we can reload our service to read our changes:

```
Sudo /etc/init.d/postfix reload
```

Step 8: Dovecot is a mail delivery agent (MDA), it delivers the emails from/to the mail server, to install it, run the following command. During the installation process, you will be asked if you want to create a self-signed SSL certificate, choose **Yes**.

```
sudo apt-get install dovecot-imapd dovecot-pop3d
```

Step 9: Next, restart Dovecot service using the following command.

```
sudo /etc/init.d/dovecot restart
```

Step 10: SquirrelMail is the email server that you'll be using to manage emails on your server, it has a simple web interface to do the job, it can be customized by installing more modules & themes.

```
sudo apt-get install squirrelmail
```

Step 11. After the installation, you will have to run this command in order to configure SquirrelMail.

```
sudo squirrelmail-configure
```

Choose the following selection:

- A. Enter “2” in order to edit the server settings, and you will be prompted to it.
- B. Now enter “1” in order to change the domain name and write up your domain (e.g: example.com).
- C. Go back to the main menu by writing “R” and hitting the enter key, write “4” in order to configure the general options.
- D. You see “Allow server-side sorting”? Enter “11” and change it from “false” to “true” by entering “y”. Now hit the Enter key, and enter the “S” key in order to save the configuration file.
- E. Copy the default configuration file to the apache2 directory in order to be able to access the web interface, run.

```
sudo cp /etc/squirrelmail/apache.conf /etc/apache2/sites-available/squirrelmail.conf
```

And enable it using:

```
sudo a2ensite squirrelmail.conf
```

Step 12: Finally, access the mail server by going to example.com/squirrelmail or 127.0.0.1/squirrelmail



Step 13: In order to start using squirrelmail webmail, you'll have to create a new user, to do so, run.

```
$ sudo useradd mul ushewa
```

Step 14: Replace “myusername” with the user name you want, create a password for the new user by running.

```
$ sudo passwd mul ushewa
```

Step 16: Create a home folder for the user in `/var/www/html/myusername` and make it default home directory.

```
$ sudo mkdir -p /var/www/html/mul ushewa
```

```
$ usermod -m -d /var/www/html/mul ushewamul ushewa
```

Step 17: you have to give the user “myusername” the complete permissions on its home folder.

```
$ sudo chown -R mul ushewa: mul ushewa / var / www / ht ml / mul ushewa
```

Step 16: Now go back to the login page and enter the user name and the password of newly created user.

The screenshot shows the SquirrelMail webmail interface. At the top, there are links for 'Sign Out' and 'SquirrelMail'. The current folder is 'INBOX'. Navigation links include 'Compose', 'Addresses', 'Folders', 'Options', 'Search', and 'Help'. The interface indicates '(Viewing Messages: 1 to 3 (3 total))' and provides a 'Toggle All' link. Below this, there are buttons for 'Delete', 'Unread', and 'Read' under the heading ':Transform Selected Messages'. To the right, there are buttons for 'Not Spam', 'Spam', 'Forward', 'Move', and 'INBOX' under the heading ':Move Selected To'. The main area displays a table of messages:

Subject	Date	From
RE: 43test	Nov 19, 2014	M.hanny sabbagh <input type="checkbox"/>
RE: 43test	Nov 19, 2014	M.hanny sabbagh <input type="checkbox"/>
43test	Nov 19, 2014	M.hanny sabbagh <input type="checkbox"/>

At the bottom, it again shows '(Viewing Messages: 1 to 3 (3 total))' and a 'Toggle All' link. On the right side, there is a 'Folders' panel showing 'INBOX - Drafts Sent Trash' and a refresh status: ':Last Refresh Sun, 12:54 pm (Check mail)'.