Setting Up a Local Mail Server on Ubuntu with Postfix, Dovecot, and Mutt

1 Introduction

This guide provides step-by-step instructions to set up a mail server on Ubuntu using **Postfix** as the SMTP server, **Dovecot** as the IMAP/POP3 server, and **Mutt** as the email client. The setup allows sending and receiving emails locally.

2 Prerequisites

- A machine running Ubuntu (preferably 22.04 LTS or later).
- Root or sudo privileges.

3 Step 1: Update System Packages

Update and upgrade your system to ensure you have the latest versions of all packages:

```
sudo apt update sudo apt upgrade -y
```

4 Step 2: Install Required Packages

Install Postfix, Dovecot, and Mutt:

```
sudo apt install postfix dovecot-core dovecot-imapd mutt -y
```

5 Step 3: Configure Postfix (SMTP Server)

Open the Postfix configuration file:

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

Update the following parameters in main.cf:

Restart Postfix to apply changes:

```
sudo systemctl restart postfix
```

6 Step 4: Configure Dovecot (IMAP/POP3 Server)

Open the Dovecot configuration file:

```
sudo nano /etc/dovecot/dovecot.conf
```

Enable the IMAP protocol by adding/updating:

```
protocols = imap
mail_location = maildir:~/Maildir
```

Open the authentication configuration file:

```
sudo nano /etc/dovecot/conf.d/10-auth.conf
```

Uncomment and set:

```
disable_plaintext_auth = no
```

Restart Dovecot to apply changes:

```
sudo systemctl restart dovecot
```

7 Step 5: Configure Mutt (Email Client)

Create a configuration file for Mutt:

```
nano ~/.muttrc
```

Add the following configuration to the file:

```
set from = "user@localhost"
set realname = "Your Name"
set mbox_type = Maildir
set folder = "~/Maildir"
set spoolfile = "~/Maildir/INBOX"
set record = "~/Maildir/Sent"
```

Save and exit.

8 Step 6: Testing the Mail Server

8.1 Send an Email

Use Mutt to send a test email:

Open Mutt:

```
mutt
```

Press m to compose a new email.

Enter the recipient email address (e.g., user@localhost).

Write your message and send it.

8.2 Check Received Emails

Use Mutt to check the received email: Open Mutt:

```
mutt
```

View your inbox for the test email.

9 Step 7: Logs and Debugging

Check Postfix logs:

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

Check Dovecot logs:

```
sudo tail -f /var/log/dovecot.log
```

10 Notes

- This setup is intended for local use only. For a production mail server, you'll need additional configurations for domains, SSL/TLS, and security.
- Ensure your firewall allows required ports:
 - **25** (SMTP)
 - **143** (IMAP)