

This tutorial explains how to setup mail server using postfix, dovecot and squirrelmail.

- » **Postfix** ( for sending )
- » **Dovecot** ( for receiving )
- » **Squirrelmail** ( for webmail access ).

Here we have used mail.groupxx.com.bd for hostname and groupxx.com.bd for Domain . Please replace with your domain .

## » Installing and configuring postfix

**Step 1** » Assign static IP and hostname and add a host entry for the host name .

Assign hostname in **/etc/hostname**

```
mail.groupxx.com.bd
```

Add a hostentry in **/etc/hosts**

```
192.168.1XX.1 mail.groupxx.com.bd
```

**Step 2** » Update the repositories.

```
$ sudo apt-get update
```

**Step 3** » Install postfix and dependencies . Press enter for all prompted questions during installation. we will do that in the next step.

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

**Step 4** » After installation issue the below command to configure postfix.

```
$ sudo dpkg-reconfigure postfix
```

Now you will be prompted for set of details . choose the following values and replace groupxx.com.bd with your domain name.

1. Internet Site
2. groupxx.com.bd
3. krizna
4. groupxx.com.bd, localhost.localdomain, localhost
5. No
6. 127.0.0.0/8 [::ffff:127.0.0.0]/104 [::1]/128 192.168.0.0/24

7. 0

8. +

9. all

**Step 5** » Now configure Postfix for SMTP-AUTH using Dovecot SASL by adding the below lines to postfix config file `/etc/postfix/main.cf` .

```
home_mailbox = Maildir/
smtpd_sasl_type = dovecot
smtpd_sasl_path = private/auth
smtpd_sasl_local_domain =
smtpd_sasl_security_options = noanonymous
broken_sasl_auth_clients = yes
smtpd_sasl_auth_enable = yes
smtpd_recipient_restrictions =
permit_sasl_authenticated,permit_mynetworks,reject_unauth_
destination
smtp_tls_security_level = may
smtpd_tls_security_level = may
smtp_tls_note_starttls_offer = yes
smtpd_tls_loglevel = 1
smtpd_tls_received_header = yes
```

**Step 6** » Now generate a digital certificate for tls. Issue the commands one by one and provide details as per your domain.

```
$ openssl genrsa -des3 -out server.key 2048
$ openssl rsa -in server.key -out server.key.insecure
$ mv server.key server.key.secure
$ mv server.key.insecure server.key
$ openssl req -new -key server.key -out server.csr
$ openssl x509 -req -days 365 -in server.csr -signkey
server.key -out server.crt
$ sudo cp server.crt /etc/ssl/certs
$ sudo cp server.key /etc/ssl/private
```

**Step 7** » Now configure certificate path

```
$ sudo postconf -e 'smtpd_tls_key_file = /etc/ssl/private/
server.key'
$ sudo postconf -e 'smtpd_tls_cert_file = /etc/ssl/certs/
server.crt'
```

**Step 8** » Open `/etc/postfix/master.cf` file and uncomment below lines to enable smtps ( 465 ) and submission ( 587 ) .

```
submission inet n          -          -          -
-          smtpd
  -o syslog_name=postfix/submission
  -o smtpd_tls_security_level=encrypt
  -o smtpd_sasl_auth_enable=yes
  -o
smtpd_relay_restrictions=permit_sasl_authenticated,reject
  -o milter_macro_daemon_name=ORIGINATING
smtps      inet  n          -          n          -
-          smtpd
  -o syslog_name=postfix/smtps
  -o smtpd_tls_wrappermode=yes
  -o smtpd_sasl_auth_enable=yes
  -o
smtpd_relay_restrictions=permit_sasl_authenticated,reject
  -o milter_macro_daemon_name=ORIGINATING
```

```

1 submission inet n          -          -          -
2           -          smtpd
3   -o syslog_name=postfix/submission
4   -o smtpd_tls_security_level=encrypt
5   -o smtpd_sasl_auth_enable=yes
6   -o
7 smtpd_relay_restrictions=permit_sasl_authenticated, reject
8
9   -o milter_macro_daemon_name=ORIGINATING
10 smtps      inet n          -          n          -
11           -          smtpd
12  -o syslog_name=postfix/smtps
13  -o smtpd_tls_wrappermode=yes
14  -o smtpd_sasl_auth_enable=yes
15  -o
16 smtpd_relay_restrictions=permit_sasl_authenticated, reject
17
18  -o milter_macro_daemon_name=ORIGINATING

```

**Step 9** » Now install Dovecot SASL by typing the below command.

```
$ sudo apt-get install dovecot-common
```

Issue the following values for the prompts during installation.

1. yes
2. mail.groupxx.com.bd

**Step 10** » Make changes to the files as follows.

Open `/etc/dovecot/conf.d/10-master.conf` file and find `# Postfix smtp-auth` line ( line no:95 ) and add the below lines .

```

# Postfix smtp-auth
unix_listener /var/spool/postfix/private/auth {
mode = 0660
user = postfix
group = postfix
}

```

Open `/etc/dovecot/conf.d/10-auth.conf` file and find (line no: 100)

```

auth_mechanisms = plain
and replace
auth_mechanisms = plain login

```

**Step 11 » Restart postfix and dovecot services**

```
$ sudo service postfix restart  
$ sudo service dovecot restart
```

**Step 12 » Now test SMTP-AUTH and smtp/pop3 port access .**  
Type the below command and should get below response.

```
$ telnet mail.groupxx.com.bd smtp  
Trying 127.0.0.1...  
Connected to localhost.  
Escape character is '^]'.  
220 mail.kriznaa.com ESMTP Postfix (Ubuntu)
```

now type **ehlo mail.groupxx.com.bd** and should get below response , please make sure you get those bolded lines .

```
ehlo mail.groupxx.com.bd  
250-mail.groupxx.com.bd  
-----  
250-STARTTLS  
250-AUTH PLAIN LOGIN  
250-AUTH=PLAIN LOGIN  
-----  
250 DSN
```

and try the same with port 587 (telnet mail.groupxx.com.bd 587).

Postfix configuration is over, continue for dovecot installation.

**» Installing and configuring dovecot**

**Step 12 » Install dovecot using the below command**

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

**Step 13 » Now configure mailbox. Open /etc/dovecot/conf.d/10-mail.conf file and find (Line no:30 )**

```
mail_location = mbox:~/mail:INBOX=/var/mail/%u
```

Replace with

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

**Step 14 » Now change pop3\_uidl\_format . Open /etc/dovecot/conf.d/20-pop3.conf file and find and uncomment the below line ( Line no : 50 )**

```
pop3_uidl_format = %08Xu%08Xv
```

**Step 15** » Now enable SSL . Open `/etc/dovecot/conf.d/10-ssl.conf` file and find and uncomment the below line ( Line no : 6 )

```
ssl = yes
```

**Step 16** » Restart dovecot service.

```
$ sudo service dovecot restart
```

**Step 17** » Now test pop3 and imap port access using the telnet command.

```
$ telnet mail.groupxx.com.bd 110
```

```
Trying 127.0.0.1...
```

```
Connected to localhost.
```

```
Escape character is '^]'.
```

```
+OK Dovecot (Ubuntu) ready.
```

Repeat the same for 995,993,143 ports.

OR check for listening ports using netstat command .

```
$ netstat -nl4
```

you should get the result like below.

```
krizna@mail:~$ netstat -nl4
Active Internet connections (only servers)
Proto Recv-Q Send-Q Local Address           Foreign Address         State
tcp        0      0 0.0.0.0:22              0.0.0.0:*               LISTEN
tcp        0      0 0.0.0.0:25              0.0.0.0:*               LISTEN
tcp        0      0 0.0.0.0:993             0.0.0.0:*               LISTEN
tcp        0      0 0.0.0.0:995             0.0.0.0:*               LISTEN
tcp        0      0 0.0.0.0:587             0.0.0.0:*               LISTEN
tcp        0      0 0.0.0.0:110             0.0.0.0:*               LISTEN
tcp        0      0 0.0.0.0:143             0.0.0.0:*               LISTEN
```

**Step 18** » Create some users and check using mail clients like thunderbird or outlook

```
$ sudo useradd -m bobby -s /sbin/nologin
```

```
$ sudo passwd bobby
```