

How to Setup a Complete Mail Server (Postfix) using 'SquirrelMail' (Webmail) on Ubuntu/Debian

by Hanny Helal | Published: December 5, 2014 | Last Updated: June 6, 2016

Creating a mail server on Linux powered machines can be one of the most essential things that every system administrator needs to do while configuring his servers for the first time, if you don't know what it means; it's simple, if you have a website like “**example.com**”, you can create an email account like “**username@example.com**” to use it to send / receive emails easily instead of using services like Hotmail, Gmil, Yahoo Mail.. etc.



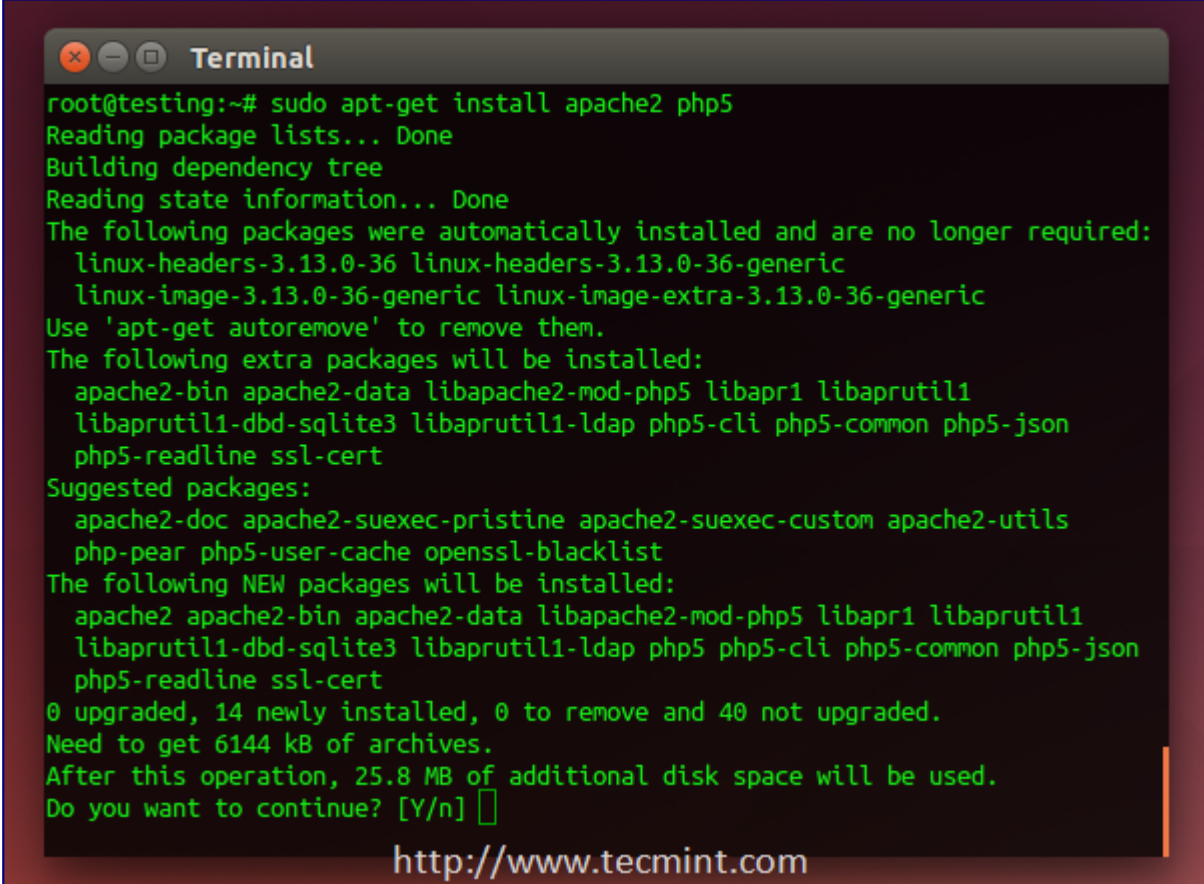
Setup Postfix Mail Server in Ubuntu/Debian

In this article, we'll learn how to do so by installing the Postfix with “**SquirrelMail**” webmail application and its dependences on Debian/Ubuntu machines.

Step 1: Installing Apache2 and PHP5

1. In order to create a running mail server using “SquirrelMail”, we’ll have to install both **Apache2** & **PHP5** packages first, to do so, run.

```
$ sudo apt-get update
$ sudo apt-get install apache2 php5
```

A terminal window titled "Terminal" with a dark background and green text. The output of the command 'sudo apt-get install apache2 php5' is displayed. It shows the process of reading package lists, building a dependency tree, and identifying packages to be installed. It lists several extra packages that will be installed along with the requested ones, such as 'apache2-bin', 'libapache2-mod-php5', and 'php5-cli'. It also shows the disk space requirements and asks for confirmation to continue. At the bottom, the URL 'http://www.tecmint.com' is visible.

```
root@testing:~# sudo apt-get install apache2 php5
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following packages were automatically installed and are no longer required:
  linux-headers-3.13.0-36 linux-headers-3.13.0-36-generic
  linux-image-3.13.0-36-generic linux-image-extra-3.13.0-36-generic
Use 'apt-get autoremove' to remove them.
The following extra packages will be installed:
  apache2-bin apache2-data libapache2-mod-php5 libapr1 libaprutil1
  libaprutil1-dbd-sqlite3 libaprutil1-ldap php5-cli php5-common php5-json
  php5-readline ssl-cert
Suggested packages:
  apache2-doc apache2-suexec-pristine apache2-suexec-custom apache2-utils
  php-pear php5-user-cache openssl-blacklist
The following NEW packages will be installed:
  apache2 apache2-bin apache2-data libapache2-mod-php5 libapr1 libaprutil1
  libaprutil1-dbd-sqlite3 libaprutil1-ldap php5 php5-cli php5-common php5-json
  php5-readline ssl-cert
0 upgraded, 14 newly installed, 0 to remove and 40 not upgraded.
Need to get 6144 kB of archives.
After this operation, 25.8 MB of additional disk space will be used.
Do you want to continue? [Y/n] ☐
```

<http://www.tecmint.com>

Install Apache and PHP

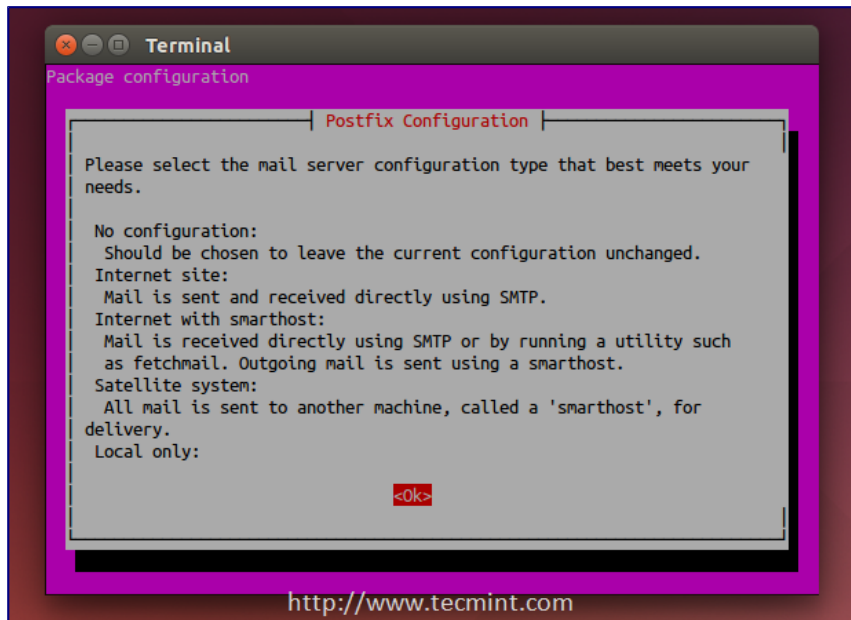
Step 2: Installing Postfix Mail Server

2. **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.

To install it on Ubuntu/Debian or even Mint, run:

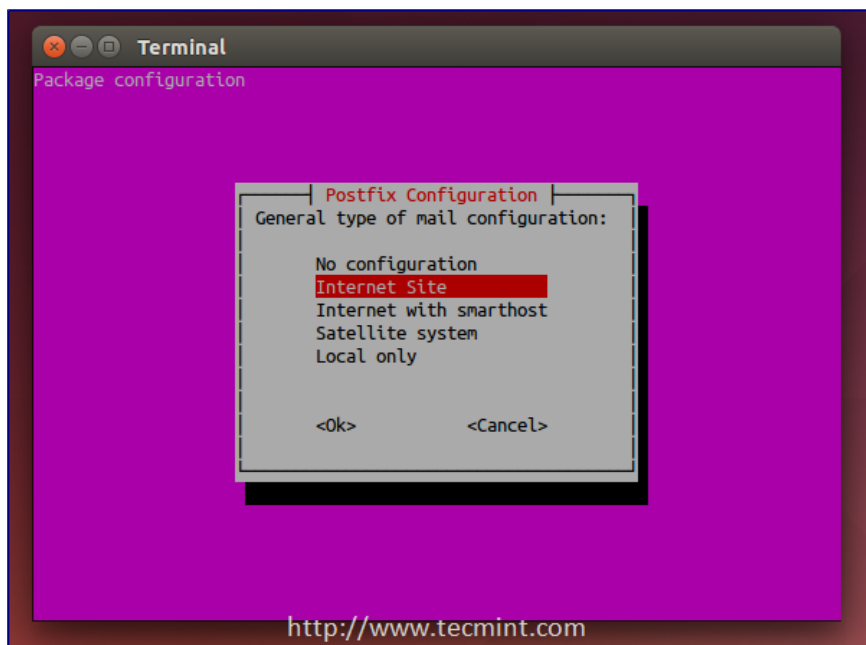
```
$ sudo apt-get install postfix
```

During installation, you will be asked to choose the default file configuration for your server.



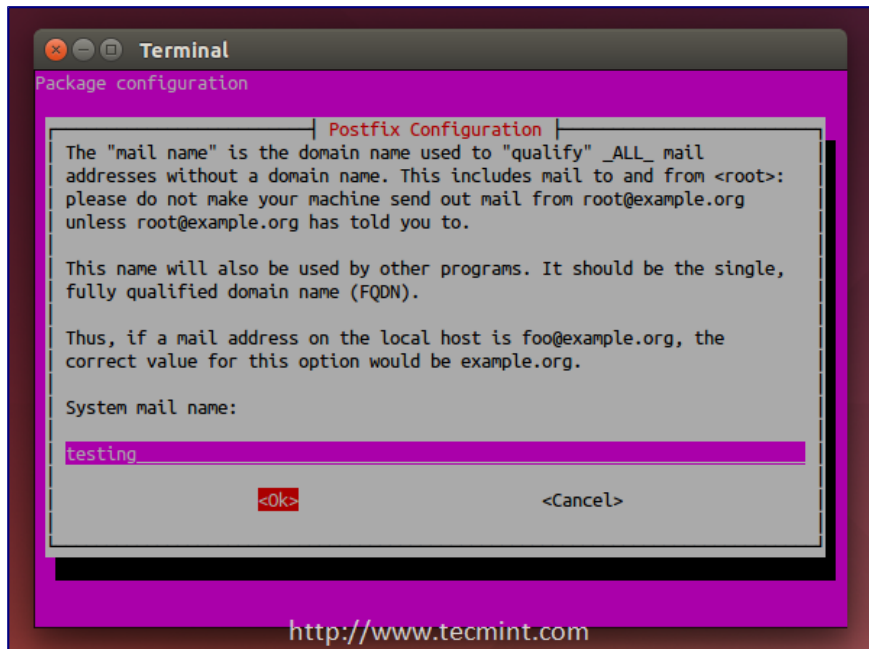
Select Postfix Configuration

3. Next, it asks you to select type of mail configuration, choose “**Internet Site**”.



Select Mail Configuration

4. Now enter the fully qualified domain name that you want to use for send and receive mails.



Enter System Mail Name

5. Once the FQDN set, you've restart the Postfix mail server using.

```
$ sudo service postfix restart
```

Step 3: Installing Dovecot

6. **Dovecot** is a mail delivery agent (MDA), it delivers the emails from/to the mail server, to install it, run the following command.

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



```
root@testing:~# sudo apt-get install dovecot-imapd dovecot-pop3d
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following packages were automatically installed and are no longer required:
  linux-headers-3.13.0-36 linux-headers-3.13.0-36-generic
  linux-image-3.13.0-36-generic linux-image-extra-3.13.0-36-generic
Use 'apt-get autoremove' to remove them.
The following extra packages will be installed:
  dovecot-core
Suggested packages:
  ntp dovecot-gssapi dovecot-sieve dovecot-pgsql dovecot-mysql dovecot-sqlite
  dovecot-ldap dovecot-lmtpd dovecot-managesieved dovecot-solr
The following NEW packages will be installed:
  dovecot-core dovecot-imapd dovecot-pop3d
0 upgraded, 3 newly installed, 0 to remove and 40 not upgraded.
Need to get 2246 kB of archives.
After this operation, 8425 kB of additional disk space will be used.
Do you want to continue? [Y/n]
```

<http://www.tecmint.com>

Install Dovecot

During the installation process, you will be asked if you want to create a self-signed SSL certificate, choose **Yes**.



```
Package configuration

Configuring dovecot-core

An SSL certificate is needed in order to use IMAP or POP3 over SSL/TLS.
No such certificate was found.

Please choose whether you want to create one now. This will then be a
self-signed certificate.

If you choose not to create a certificate, please adapt Dovecot's
configuration file (/etc/dovecot/conf.d/10-ssl.conf).

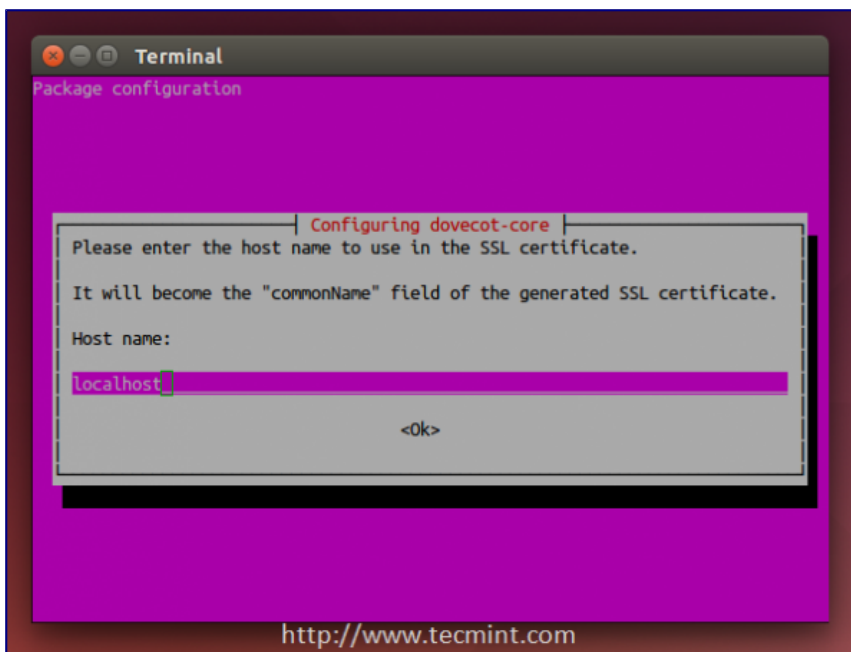
Create a self-signed SSL certificate?

<Yes> <No>
```

<http://www.tecmint.com>

Create Mail SSL Certificate

7. Next, enter your host name to use in the SSL certificate.



Enter Hostname to use SSL

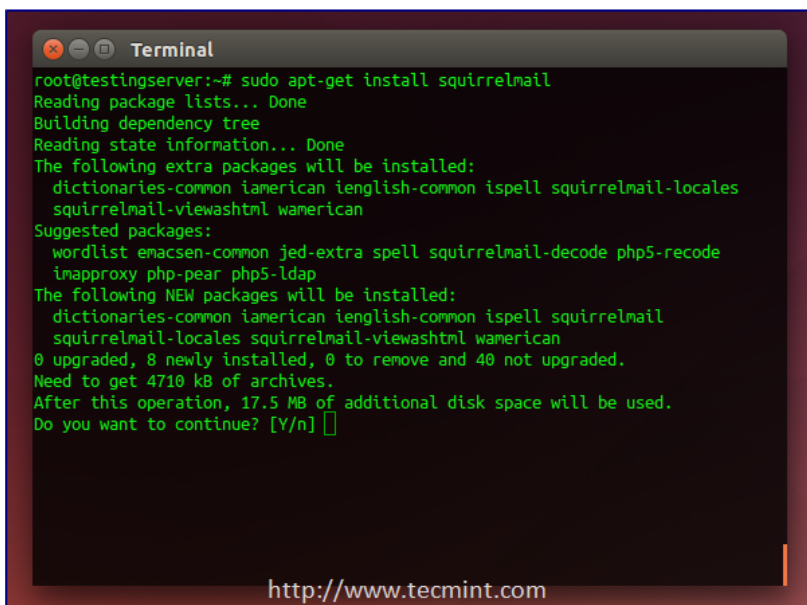
8. Next, restart Dovecot service using the following command.

```
$ sudo service dovecot restart
```

Step 4: Installing SquirrelMail

9. **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.

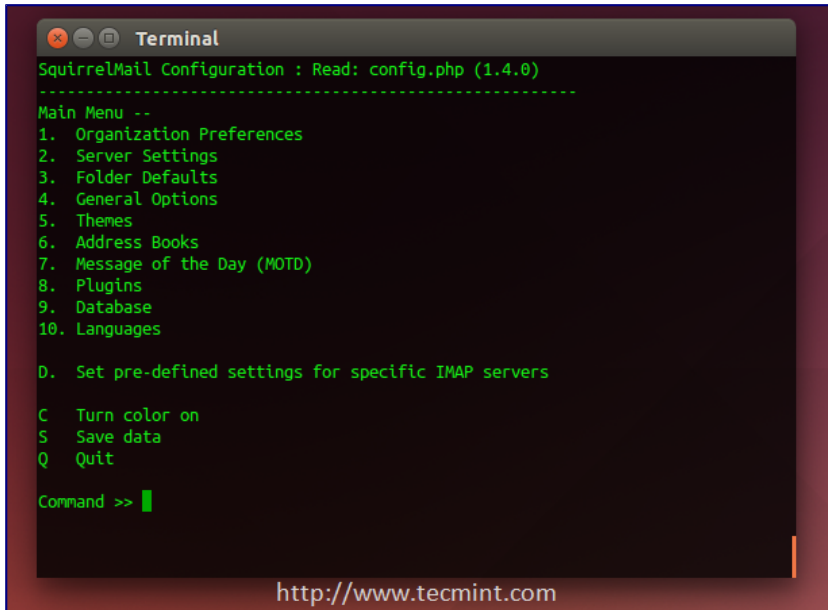
```
$ sudo apt-get install squirrelmail
```



install Squirrelmail

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

```
$ sudo squirrelmail-configure
```

A terminal window titled "Terminal" showing the SquirrelMail Configuration menu. The text is as follows:

```
SquirrelMail Configuration : Read: config.php (1.4.0)
-----
Main Menu --
1. Organization Preferences
2. Server Settings
3. Folder Defaults
4. General Options
5. Themes
6. Address Books
7. Message of the Day (MOTD)
8. Plugins
9. Database
10. Languages

D. Set pre-defined settings for specific IMAP servers

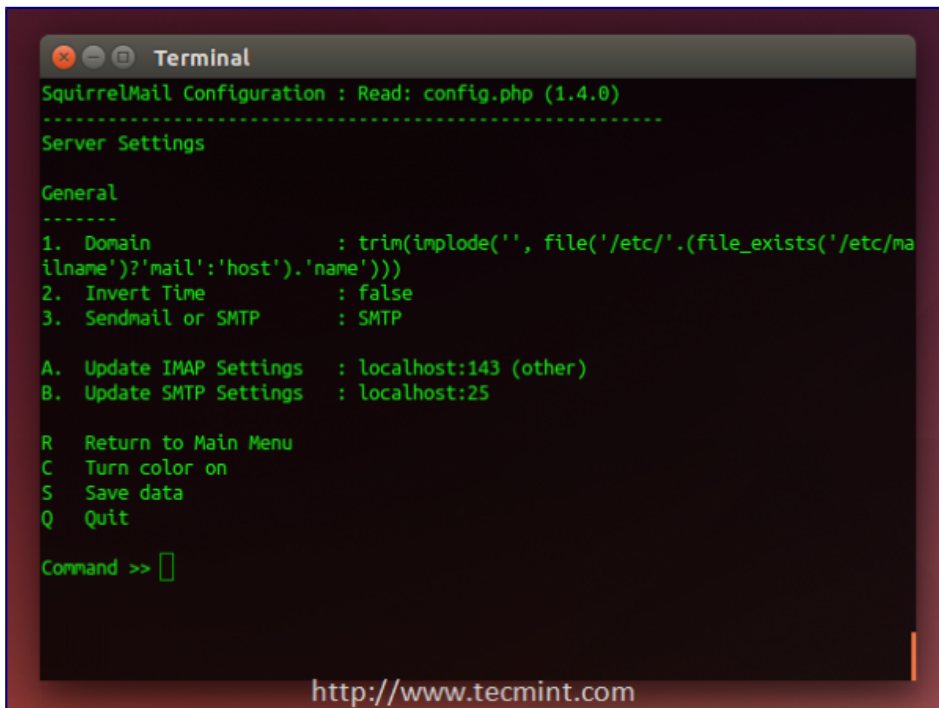
C Turn color on
S Save data
Q Quit

Command >> |
```

At the bottom of the terminal window, the URL <http://www.tecmint.com> is displayed.

Configure Squirrelmail

11. Next, enter “2” in order to edit the server settings, and you will be prompted to it.

A terminal window titled "Terminal" showing the SquirrelMail Server Settings menu. The text is as follows:

```
SquirrelMail Configuration : Read: config.php (1.4.0)
-----
Server Settings

General
-----
1. Domain           : trin(implode('', file('/etc/' . (file_exists('/etc/mailname')?'mail':'host'). 'name'))))
2. Invert Time       : false
3. Sendmail or SMTP  : SMTP

A. Update IMAP Settings : localhost:143 (other)
B. Update SMTP Settings : localhost:25

R Return to Main Menu
C Turn color on
S Save data
Q Quit

Command >> |
```

At the bottom of the terminal window, the URL <http://www.tecmint.com> is displayed.

Configure Server Settings for Mail

12. Now enter “1” in order to change the domain name and write up your domain (e.g: **example.com**).

```
Terminal

General
-----
1. Domain          : trim(implode('', file('/etc/'.(file_exists('/etc/mailname')?'mail':'host').'name'))))
2. Invert Time     : false
3. Sendmail or SMTP : SMTP

A. Update IMAP Settings : localhost:143 (other)
B. Update SMTP Settings : localhost:25

R  Return to Main Menu
C  Turn color on
S  Save data
Q  Quit

Command >> 1

The domain name is the suffix at the end of all email addresses.  If
for example, your email address is jdoe@example.com, then your domain
would be example.com.

[trim(implode('', file('/etc/'.(file_exists('/etc/mailname')?'mail':'host').'name')))] : example.com
http://www.tecmint.com
```

Set Mail Domain Name

13. Go back to the main menu by writing “R” and hitting the enter key, write “4” in order to configure the general options.

```
Terminal

Allow editing of name      : true
Remove username from header : false
10. Allow server thread sort : false
11. Allow server-side sorting : false
12. Allow server charset search : true
13. Enable UID support      : true
14. PHP session name        : SQMSESSID
15. Location base           :
16. Only secure cookies if poss. : true
17. Disable secure forms    : false
18. Page referral requirement :
19. Browser rendering mode  : quirks

R  Return to Main Menu
C  Turn color on
S  Save data
Q  Quit

Command >> 11

This option allows you to choose if SM uses server-side sorting
Your IMAP server must support the SORT command for this to work

Allow server-side sorting? (y/n) [n]: y
http://www.tecmint.com
```

Configure Mail General Options

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.

Now, we'll 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
```

14. You can now access the mail server by going to **example.com/squirrelmail**.



Access Squirrelmail

Step 5: Creating Mail Users

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

```
$ sudo useradd myusername
```

Replace "**myusername**" with the user name you want, create a password for the new user by running.

```
$ sudo passwd myusername
```

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

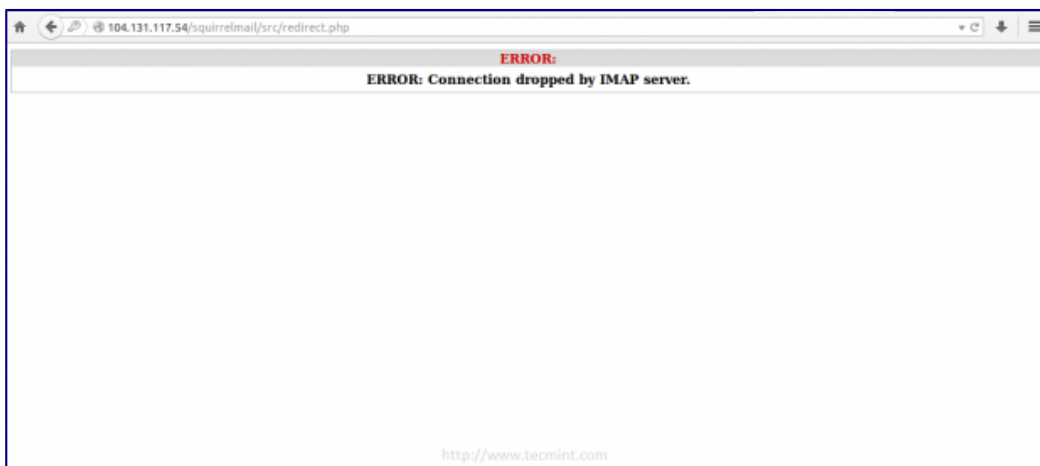
```
$ sudo mkdir -p /var/www/html/myusername  
$ usermod -m -d /var/www/html/myusername myusername
```

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



Access Squirrelmail

You will be surprise to see the following error message.

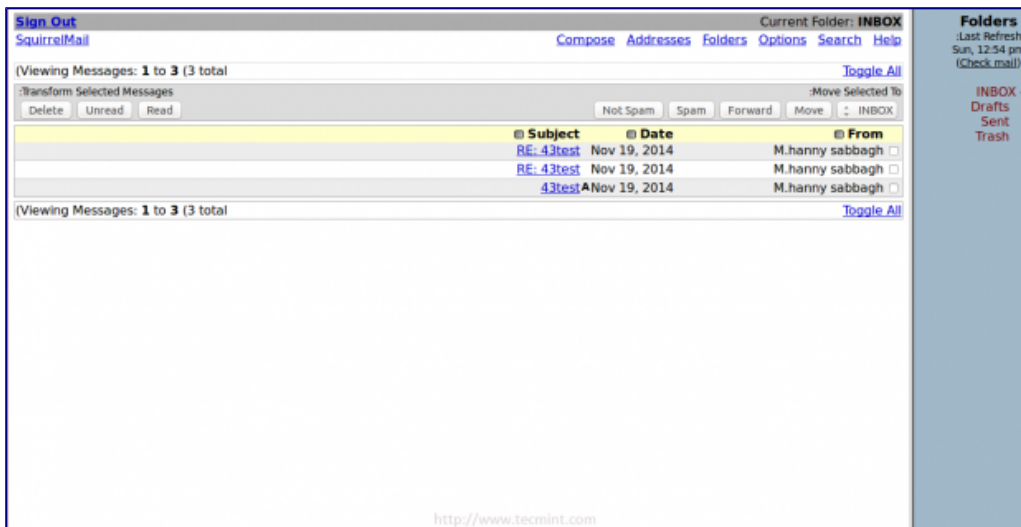


Login to Squirrelmail

This is just a problem in the permissions, you have to give the user “**myusername**” the complete permissions on its home folder.

```
$ sudo chown -R myusername:myusername /var/www/html/myusername
```

18. Once permission set, you should able to login into squirrelmail.



Squirrelmail Mail Interface

You can try to send email from it, or you can try to receive emails by sending it to **“myusername@example.com”**, don’t forget to replace **“myusername”** with the user name you created.

If you faced any other error.. Just check the **“/var/log/mail.err”** file, all the error message will be stored there, you won’t lose your way :)

Have you tried to create an email server before? How did it go? Have you used SquirrelMail or any other mail server before? What do you think about it?