

## Setting up Exim4, Dovecot, and Squirrelmail on Debian Jessie

Since Exim4 is already installed, we need to make a configuration change for it to use the "Maildir" format.

Run this command from the root prompt: **dpkg-reconfigure exim4-config**

I will walk you through the choices but we want it to be an Internet mail server and deliver mail to the users in the **Maildir** format.

Typically these are the choices:

- 1<sup>st</sup> screen – Choose Internet site and OK
- 2<sup>nd</sup> screen – System mail name will usually already be populated with the fqdn
- 3<sup>rd</sup> screen – IP addresses to listen on, delete everything and leave blank
- 4<sup>th</sup> screen – Other destination for which mail is accepted – 10.227.4.0/24
- 5<sup>th</sup> screen – Domains to relay mail – leave blank
- 6<sup>th</sup> screen – Machines to relay mail – fqdn of your machine
- 7<sup>th</sup> screen – Keep number of DNS queries minimal – No
- 8<sup>th</sup> screen – Maildir format in local directory
- 9<sup>th</sup> screen – Split configuration in small files = No

At this point it will exit. See special note for non-routable IP address and do this next as needed.

Restart Exim4 **/etc/init.d/exim4 restart** This reloads the configuration file.

If you **vi /etc/exim4/update-exim4.conf.conf** you should see this at the bottom of the configuration file: `dc_localdelivery='maildir_home'`

Exit from vi with **Esc:q!**

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### Special note for using non-routable – “Class C” networks

In order to be able to send mail in a classroom environment across our non-routable network, we need to edit `/etc/exim4/exim.conf.template`.

About line 1062 are exclusions for most non-routable networks. If you are using one such as 10.227.4.0, you need to edit this exclusion to remove the 10.0.0.0/8 entry to allow our 10 dot network. Make sure you remove the trailing colon as well. Save and restart exim4.

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Next we want to install the Dovecot IMAP e-mail program.

**apt-get install dovecot-imapd**

As of **Debian Jessie**, the configuration files for dovecot have been broken into multiple files.

The changes between the lines apply to **Debian Wheezy** and earlier. See below the lines for changes for **Debian Jessie**.

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### **vi /etc/dovecot/dovecot.conf**

We need to make a couple of changes here.

If you Esc : 25 it will take you to line 25 where we need to uncomment the protocols = imap imaps line

This allows Dovecot to serve as an imap mail client.

Next Esc : 47 to go to line 47. We need to uncomment the line listen = \*

This allows it to listen on any port.

Now Esc : 224 to go to line 224. We need to uncomment the line mail\_location = maildir:~/Maildir

This allows it to use the Maildir format.

Now **Esc : wq** to save the file and restart Dovecot with **/etc/init.d/dovecot restart**

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**Debian Jessie specific:** Uncomment the /etc/dovecot/dovecot.conf file at line 29 so it looks like this: **listen = \*, ::** to allow it to listen on ipv4 and ipv6. **Esc : wq** to save the file.

Now edit the /etc/dovecot/conf.d/10-mail.conf line to uncomment line 24 where it says:

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

and comment out line 30 where it says

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

This sets the location of dovecot to use the Maildir format.

Now **Esc : wq** to save the file and restart Dovecot with **/etc/init.d/dovecot restart**

This reloads the configuration for dovecot

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## Testing e-mail from the command prompt

### Send Email via Telnet

On occasion, we write code that sends email. Usually, it works the first time. But sometimes we need to figure out why not.

For that reason, we sometimes resort to manual telnet sessions with a remote mail server.

### Simple manual telnet session with mail host

Uppercase/lowercase does not appear to be significant.

You type this:

Telnet to hostname on port 25 **Example:** `telnet somedomain.com 25`

220 (then identifies itself - with several lines of 220 + text)

HELO your\_domain\_name or whatever  
250 (followed by human readable message)

MAIL FROM:you@hostname.com (ie, your email address)  
250 is syntactically correct (or similar)

RCPT TO:them@someplace\_else.com (email address you want to send to)  
250 is syntactically correct

DATA  
Tells you to send data then CRLF period CRLF at end

Subject: My Telnet Test Email  
Body of message

You type your message then CRLF period CRLF (ie, type a period on a line by itself then hit ENTER)

250  
QUIT

Signoff message

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## Send mail using the installed mutt program

Typically you use the mutt mail program to send mail from a command prompt. Type mutt and press enter. It opens a window with some options. If this is the first time being used, it may prompt you to create a mail directory.

Select **m** to create a new mail and fill in the **To:** and **Subject:** fields then press enter and it will open a nano type editor where you can enter the body or text of the message. Press **Ctrl O** to create a file name, press enter to accept, and press **Ctrl X** to exit. Then press **y** to send the message.

The message can be seen in the users Maildir/cur folder and will be a long string of numbers and text. You can view it by using **cat**, **nano**, or **vi**.

While these are usable, most users would prefer a graphical environment. See the squirrelmail example below to install a GUI based web mail client.

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## Optional – Install GUI web based client for accessing mail

### apt-get install squirrelmail

From the root command line run **squirrelmail-configure**

This will present an interactive menu where SquirrelMail can be configured.

Select option, D. Set pre-defined settings for specific IMAP servers. This preloads some settings specifically for your IMAP server package.

Enter dovecot

Press S to save and Q to quit.

Under /etc/squirrelmail/ there is a file called apache.conf In order to be able to access squirrelmail from a web browser, we need to let apache2 know about this file.

**vi /etc/apache2/apache2.conf** and add this line at the bottom of the file:

```
include /etc/squirrelmail/apache.conf
```

**Esc : wq** to save the file.

This tells apache2 to include this configuration file so we can access squirrelmail at [http://\(IP address\)/squirrelmail](http://(IP address)/squirrelmail)

We need to restart apache2 to reload the configuration  
**/etc/init.d/apache2 restart**

Now open your browser and type in `http://your_ip_address/squirrelmail`

It should display the web interface and you can log in as your standard user (not root) and your user password. You will see a full featured web page that allows you to read and send mail for your normal user.

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