

⌵ ⌵ ⌵ joe@mail-thegummibear: ~

```
joe@mail-thegummibear:~$ echo "On the mail server. We are going to install Dovec  
at which will provide a secure IMAP service"
```

```
On the mail server. We are going to install Dovecat which will provide a secure  
IMAP service
```

```
joe@mail-thegummibear:~$ sudo apt-get install dovecot-imapd
```

joe@mail-thegummibear: /etc/dovecot

joe@mail-thegummibear: /etc/dovecot\$ ls -l

total 40

drwxr-xr-x	2	root	root	4096	Sep 22	13:48	conf.d
-rw-r--r--	1	root	root	4401	Apr 5	07:38	dovecot.conf
-rw-r-----	1	root	dovecot	1507	Mar 16	2016	dovecot-dict-auth.conf.ext
-rw-r-----	1	root	dovecot	852	Mar 16	2016	dovecot-dict-sql.conf.ext
-rw-r--r--	1	root	root	1241	Sep 22	11:38	dovecot.pem
-rw-r-----	1	root	dovecot	5612	Mar 16	2016	dovecot-sql.conf.ext
drwxr-xr-x	2	root	root	4096	Sep 22	11:38	private
-rw-r--r--	1	root	root	121	Apr 5	07:45	README

joe@mail-thegummibear: /etc/dovecot\$

⌵ ⌵ ⌵ joe@mail-thegummibear: /etc/dovecot

```
joe@mail-thegummibear:/etc/dovecot$ echo "We need to generate a public/private key pair for secure transmission"
```

```
We need to generate a public/private key pair for secure transmission
```

```
joe@mail-thegummibear:/etc/dovecot$ █
```

joe@mail-thegummibear: /usr/share/dovecot

joe@mail-thegummibear: /etc/dovecot\$ cd /usr/share/dovecot/

joe@mail-thegummibear: /usr/share/dovecot\$ ls

conf.d	dovecot-dict-sql.conf.ext	mkcert.sh
dovecot.conf	dovecot-openssl.cnf	protocols.d
dovecot-dict-auth.conf.ext	dovecot-sql.conf.ext	stopwords

joe@mail-thegummibear: /usr/share/dovecot\$ █

⌘ ⌵ ⌘ joe@mail-thegummibear: /usr/share/dovecot

joe@mail-thegummibear: /usr/share/dovecot\$ sudo vi dovecot-openssl.cnf

```
# SSLey configuration file for Dovecot.
```

```
#
```

```
RANDFILE = /dev/urandom
```

```
[ req ]
```

```
default_bits = 2048
```

```
default_keyfile = privkey.pem
```

```
distinguished_name = req_distinguished_name
```

```
prompt = no
```

```
policy = policy_anything
```

```
req_extensions = v3_req
```

```
x509_extensions = v3_req
```

```
[ req_distinguished_name ]
```

```
organizationName = The Gummi Bear
```

```
organizationalUnitName = CIT
```

```
commonName = mail.thegummibear.com
```

```
emailAddress = joe@thegummibear.com
```

```
[ v3_req ]
```

```
basicConstraints = CA:FALSE
```

```
"dovecot-openssl.cnf" 23L, 543C
```

joe@mail-thegummibear: /usr/share/dovecot

joe@mail-thegummibear: /usr/share/dovecot\$ ls

```
conf.d                dovecot-dict-sql.conf.ext  mkcert.sh
dovecot.conf          dovecot-openssl.cnf       protocols.d
dovecot-dict-auth.conf.ext  dovecot-sql.conf.ext     stopwords
```

joe@mail-thegummibear: /usr/share/dovecot\$ sudo ./mkcert.sh

root@mail-thegummibear: /etc/dovecot

joe@mail-thegummibear:/etc/dovecot\$ sudo bash

root@mail-thegummibear:/etc/dovecot# ls

```
conf.d          dovecot-dict-auth.conf.ext  dovecot.pem          private
dovecot.conf    dovecot-dict-sql.conf.ext  dovecot-sql.conf.ext  README
```

root@mail-thegummibear:/etc/dovecot# ls private/

dovecot.pem

root@mail-thegummibear:/etc/dovecot# echo "here is my private key"

here is my private key

root@mail-thegummibear:/etc/dovecot#

root@mail-thegummibear: /etc/dovecot

root@mail-thegummibear: /etc/dovecot# vi conf.d/10-ssl.conf

```
##  
## SSL settings  
##  
  
# SSL/TLS support: yes, no, required. <doc/wiki/SSL.txt>  
ssl = yes  
  
# PEM encoded X.509 SSL/TLS certificate and private key. They're opened before  
# dropping root privileges, so keep the key file unreadable by anyone but  
# root. Included doc/mkcert.sh can be used to easily generate self-signed  
# certificate, just make sure to update the domains in dovecot-openssl.cnf  
ssl_cert = </etc/dovecot/private/dovecot.pem  
ssl_key = </etc/dovecot/private/dovecot.key  
  
# If key file is password protected, give the password here. Alternatively  
# give it when starting dovecot with -p parameter. Since this file is often  
# world-readable, you may want to place this setting instead to a different  
# root owned 0600 file by using ssl_key_password = <path.  
#ssl_key_password =  
  
# PEM encoded trusted certificate authority. Set this only if you intend to use  
# ssl_verify_client_cert=yes. The file should contain the CA certificate(s)  
# followed by the matching CRL(s). (e.g. ssl_ca = </etc/ssl/certs/ca.pem)  
"/etc/dovecot/conf.d/10-ssl.conf" 63L, 2329C 12,33 Top
```

root@mail-thegummibear: /etc/dovecot

```
root@mail-thegummibear:/etc/dovecot# service dovecot restart
```

```
root@mail-thegummibear:/etc/dovecot#
```

Active Internet connections (servers and established)

Proto	Recv-Q	Send-Q	Local Address	Foreign Address	State
PID/Program name					
tcp	0	0	*:imap2	*:*	LISTEN
28699/dovecot					
tcp	0	0	*:ssh	*:*	LISTEN
2158/sshd					
tcp	0	0	mail.thegummibear.:smtp	*:*	LISTEN
2532/exim4					
tcp	0	0	localhost:smtp	*:*	LISTEN
2532/exim4					
tcp	0	0	*:imaps	*:*	LISTEN
28699/dovecot					
tcp	0	296	mail.thegummibear.c:ssh	yavin.cs.dixie.ed:56790	ESTABLISHED
28272/sshd: joe [pr					
tcp6	0	0	:::imap2	:::*	LISTEN
28699/dovecot					
tcp6	0	0	:::ssh	:::*	LISTEN
2158/sshd					
tcp6	0	0	localhost:smtp	:::*	LISTEN
2532/exim4					
tcp6	0	0	:::imaps	:::*	LISTEN
28699/dovecot					

root@mail-thegummibear: /etc/dovecot

root@mail-thegummibear: /etc/dovecot ×

joe@yavin: ~/Pictures ×

```
root@mail-thegummibear:/etc/dovecot# echo "we don't want the imap2 port. It is insecure"
```

```
we don't want the imap2 port. It is insecure
```

```
root@mail-thegummibear:/etc/dovecot# █
```

root@mail-thegummibear: /etc/dovecot

root@mail-thegummibear: /etc/dovecot ×

joe@yavin: ~/Pictures ×

root@mail-thegummibear: /etc/dovecot# vi conf.d/10-master.conf

```
#default_process_limit = 100
#default_client_limit = 1000

# Default VSZ (virtual memory size) limit for service processes. This is mainly
# intended to catch and kill processes that leak memory before they eat up
# everything.
#default_vsz_limit = 256M

# Login user is internally used by login processes. This is the most untrusted
# user in Dovecot system. It shouldn't have access to anything at all.
#default_login_user = dovenull

# Internal user is used by unprivileged processes. It should be separate from
# login user, so that login processes can't disturb other processes.
#default_internal_user = dovecot

service imap-login {
  inet_listener imap {
    #port = 143
    #disable plain text logins
    port = 0
  }
  inet_listener imaps {

```

"conf.d/10-master.conf" 121L, 3427C written

root@mail-thegummibear: /etc/dovecot

root@mail-thegummibear: /etc/dovecot ×

joe@yavin: ~/Pictures ×

```
root@mail-thegummibear: /etc/dovecot# service dovecot restart
```



```
root@mail-thegummibear: /etc/dovecot# service dovecot restart
```

```
root@mail-thegummibear: /etc/dovecot# netstat -atup
```

```
Active Internet connections (servers and established)
```

Proto	Recv-Q	Send-Q	Local Address	Foreign Address	State
tcp	0	0	*:ssh	*:*	LISTEN
2158/sshd					
tcp	0	0	mail.thegummibear.:smtp	*:*	LISTEN
2532/exim4					
tcp	0	0	localhost:smtp	*:*	LISTEN
2532/exim4					
tcp	0	0	*:imaps	*:*	LISTEN
28723/dovecot					
tcp	0	296	mail.thegummibear.c:ssh	yavin.cs.dixie.ed:56790	ESTABLISHED
28272/sshd: joe [pr					
tcp6	0	0	:::ssh	:::*	LISTEN
2158/sshd					
tcp6	0	0	localhost:smtp	:::*	LISTEN
2532/exim4					
tcp6	0	0	:::imaps	:::*	LISTEN
28723/dovecot					

```
root@mail-thegummibear: /etc/dovecot#
```