

HOWTO Virtual Mail Hosting on CentOS 6.x

Postfix MySQL Dovecot PostfixAdmin Amavisd-new Spamassassin Clamav

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URL: <http://www.campworld.net/thewiki/pmwiki.php/LinuxServersCentOS/Cent6VirtMailServer>

Start with my HOWTO: CentOS 6.x base server.

- Install packages:

```
> yum install roundcubemail dovecot dovecot-mysql dovecot-pigeonhole cyrus-sasl-devel cyrus-sasl-sql
subversion
> yum install perl-MailTools perl-MIME-EncWords perl-MIME-Charset perl-Email-Valid perl-Test-Pod
perl-TimeDate
> yum install perl-Mail-Sender perl-Log-Log4perl imapsync offlineimap
> yum install amavisd-new clamav clamd perl-Razor-Agent perl-Convert-BinHex crypto-utils mod_ssl
```

- Postfix.Admin doesn't have an rpm so we need to download it and put it where we want it.

```
> wget http://sourceforge.net/projects/postfixadmin/files/latest/download
> tar -xzf postfixadmin-2.3.5.tar.gz
> mv postfixadmin-2.3.5 /usr/share/postfixadmin
```

- Setup SSL Certificate

Replace mail.example.com with your server hostname.

```
> genkey --days 3650 mail.example.com
```

- Setup the Virtual Mail User

```
> mkdir /home/vmail
> chmod 770 /home/vmail
> useradd -r -u 101 -g mail -d /home/vmail -s /sbin/nologin -c "Virtual mailbox" vmail
> chown vmail:mail /home/vmail
```

- Configuring Postfix Admin

```
/etc/httpd/conf.d/postfixadmin.conf
alias /mailadmin /usr/share/postfixadmin
<Directory "/usr/share/postfixadmin">
    AllowOverride AuthConfig
</Directory>
```

```
> service httpd restart
```

Now we need to setup the mysql database for postfixadmin:

```
> mysql -u root -p -e "CREATE DATABASE postfix;"
> mysql -u root -p -e "CREATE USER postfix@localhost IDENTIFIED BY 'choose_a_password';"
> mysql -u root -p -e "GRANT ALL PRIVILEGES ON postfix . * TO postfix@localhost;"
> cd /usr/share/postfixadmin
> nano -w config.php
```

```

<?php
/**
 * Contains configuration options that override the default config file
 */

/*****
 * !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
 * You have to set $CONF['configured'] = true; before the
 * application will run!
 * Doing this implies you have changed this file as required.
 * i.e. configuring database etc; specifying setup.php password etc.
 */
$CONF['configured'] = true;

// In order to setup Postfixadmin, you MUST specify a hashed password here.
// To create the hash, visit setup.php in a browser and type a password into the
field,
// on submission it will be echoed out to you as a hashed value.
$CONF['setup_password'] = 'changeme';
$CONF['postfix_admin_url'] = '/mailadmin';
$CONF['database_type'] = 'mysql';
$CONF['database_host'] = 'localhost';
$CONF['database_user'] = 'postfix';
$CONF['database_password'] = 'changeme';
$CONF['database_name'] = 'postfix';
$CONF['admin_email'] = 'postmaster@change-this-to-your.domain.tld';
$CONF['encrypt'] = 'md5crypt';
$CONF['dovecotpw'] = "/usr/sbin/doveadm pw";
$CONF['min_password_length'] = 6;
$CONF['page_size'] = '20';
$CONF['domain_path'] = 'YES';
$CONF['domain_in_mailbox'] = 'NO';
$CONF['aliases'] = '50';
$CONF['mailboxes'] = '50';
$CONF['maxquota'] = '100';
$CONF['quota'] = 'YES';
$CONF['quota_multiplier'] = '1024000';
$CONF['transport'] = 'YES';
$CONF['transport_options'] = array (
    'virtual', // for virtual accounts
    'local',   // for system accounts
    'relay'   // for backup mx
);
$CONF['transport_default'] = 'virtual';
$CONF['vacation'] = 'YES';
$CONF['vacation_domain'] = 'autoreply.change-this-to-your.domain.tld';
$CONF['vacation_control'] = 'YES';
$CONF['vacation_control_admin'] = 'YES';
$CONF['special_alias_control'] = 'YES';
$CONF['user_footer_link'] = "http://change-this-to-your.domain.tld/main";
$CONF['show_footer_text'] = 'YES';
$CONF['footer_text'] = 'Return to change-this-to-your.domain.tld';
$CONF['footer_link'] = 'http://change-this-to-your.domain.tld';
$CONF['create_mailbox_subdirs']=array('Drafts', 'Spam', 'Sent', 'Trash');
$CONF['create_mailbox_subdirs_host']='localhost';
$CONF['create_mailbox_subdirs_prefix']='';
$CONF['used_quotas'] = 'YES';
$CONF['new_quota_table'] = 'YES';
// $CONF['create_mailbox_subdirs_hostoptions']=array('notls');
$CONF['create_mailbox_subdirs_hostoptions']=array('novalidate-cert', 'norsh');

//
// END OF CONFIG FILE
//

```

Next we need to run the setup.php script in a web browser. Enter the url in your browser. Ex. <http://yourdomain.tld/mailadmin/setup.php>

If everything shows OK then create the admin user using the form displayed. Follow the instructions for setting the setup password.

Log into the web interface and follow the directions:

<http://yourdomain.tld/mailadmin/>

- Configuring Postfix

Just copy and past to create the config files. What ever you see here replaces what already exists: /etc/postfix/main.cf :

```
# postfix config file

# uncomment for debugging if needed
#soft_bounce=yes

# postfix main
mail_owner = postfix
setgid_group = postdrop
delay_warning_time = 4

# postfix paths
html_directory = no
command_directory = /usr/sbin
daemon_directory = /usr/libexec/postfix
queue_directory = /var/spool/postfix
sendmail_path = /usr/sbin/sendmail.postfix
newaliases_path = /usr/bin/newaliases.postfix
mailq_path = /usr/bin/mailq.postfix
manpage_directory = /usr/share/man

# network settings
inet_interfaces = all
mydomain = yourdomain.com
myhostname = host.yourdomain.com
mynetworks = $config_directory/mynetworks
mydestination = $myhostname, localhost.$mydomain, localhost
relay_domains = proxy:mysql:/etc/postfix/mysql-relay_domains_maps.cf

# mail delivery
recipient_delimiter = +

# mappings
alias_maps = hash:/etc/aliases
alias_database = hash:/etc/aliases
transport_maps = hash:/etc/postfix/transport
#local_recipient_maps =

# virtual setup
virtual_alias_maps = proxy:mysql:/etc/postfix/mysql-virtual_alias_maps.cf,
                    regexp:/etc/postfix/virtual_regexp
virtual_mailbox_base = /home/vmail
virtual_mailbox_domains = proxy:mysql:/etc/postfix/mysql-virtual_domains_maps.cf
virtual_mailbox_maps = proxy:mysql:/etc/postfix/mysql-virtual_mailbox_maps.cf
virtual_mailbox_limit_maps = proxy:mysql:/etc/postfix/mysql-
virtual_mailbox_limit_maps.cf
virtual_minimum_uid = 101
virtual_uid_maps = static:101
virtual_gid_maps = static:12
```

```
virtual_transport = dovecot
dovecot_destination_recipient_limit = 1

# debugging
debug_peer_level = 2
debugger_command =
    PATH=/bin:/usr/bin:/usr/local/bin:/usr/X11R6/bin
    xxgdb $daemon_directory/$process_name $process_id & sleep 5

# authentication
smtpd_sasl_auth_enable = yes
smtpd_sasl_security_options = noanonymous
smtpd_sasl_local_domain = $myhostname
broken_sasl_auth_clients = yes
smtpd_sasl_type = dovecot
smtpd_sasl_path = private/auth

# tls config
smtp_use_tls = yes
smtpd_use_tls = yes
smtpd_tls_security_level = may
smtpd_tls_loglevel = 1
smtpd_tls_received_header = yes
smtpd_tls_session_cache_timeout = 3600s
tls_random_source = dev:/dev/urandom
smtp_tls_session_cache_database = btree:$data_directory/smtp_tls_session_cache
# Change mail.example.com.* to your host name
smtpd_tls_key_file = /etc/pki/tls/private/mail.example.com.key
smtpd_tls_cert_file = /etc/pki/tls/certs/mail.example.com.crt
# smtpd_tls_CAfile = /etc/pki/tls/root.crt

# rules restrictions
smtpd_client_restrictions =
smtpd_helo_restrictions =
smtpd_sender_restrictions =
smtpd_recipient_restrictions = permit_sasl_authenticated,
    permit_mynetworks,
    reject_unauth_destination,
    reject_non_fqdn_sender,
    reject_non_fqdn_recipient,
    reject_unknown_recipient_domain
# uncomment for realtime black list checks
#     ,reject_rbl_client zen.spamhaus.org
#     ,reject_rbl_client bl.spamcop.net
#     ,reject_rbl_client dnsbl.sorbs.net

smtpd_helo_required = yes
unknown_local_recipient_reject_code = 550
disable_vrfy_command = yes
smtpd_data_restrictions = reject_unauth_pipelining

# Other options
# email size limit ~20Meg
message_size_limit = 204800000

mailbox_size_limit = 2048000000
```

/etc/postfix/master.cf :

```
#
# Postfix master process configuration file.  For details on the format
# of the file, see the Postfix master(5) manual page.
#
```

```

# ***** Unused items removed *****
# =====
# service type      private unpriv  chroot  wakeup  maxproc  command + args
#                   (yes)   (yes)   (yes)   (never) (100)
# =====
smtp      inet  n       -       n       -       -       smtpd
# -o content_filter=smtp-amavis:127.0.0.1:10024
# -o receive_override_options=no_address_mappings
pickup   fifo  n       -       n       60      1       pickup
# -o content_filter=
# -o receive_override_options=no_header_body_checks
cleanup  unix  n       -       n       -       0       cleanup
qmgr      fifo  n       -       n       300     1       qmgr
#qmgr     fifo  n       -       n       300     1       oqmgr
tlsmgr   unix  -       -       n       1000?   1       tlsmgr
rewrite  unix  -       -       n       -       -       trivial-rewrite
bounce    unix  -       -       n       -       0       bounce
defer     unix  -       -       n       -       0       bounce
trace    unix  -       -       n       -       0       bounce
verify    unix  -       -       n       -       1       verify
flush     unix  n       -       n       1000?   0       flush
proxymap unix  -       -       n       -       -       proxymap
smtp      unix  -       -       n       -       -       smtp
# When relaying mail as backup MX, disable fallback_relay to avoid MX loops
relay     unix  -       -       n       -       -       smtp
# -o fallback_relay=
# -o smtp_helo_timeout=5 -o smtp_connect_timeout=5
showq     unix  n       -       n       -       -       showq
error     unix  -       -       n       -       -       error
discard   unix  -       -       n       -       -       discard
local     unix  -       n       n       -       -       local
virtual   unix  -       n       n       -       -       virtual
lmtpl     unix  -       -       n       -       -       lmtpl
anvil     unix  -       -       n       -       1       anvil
scache    unix  -       -       n       -       1       scache
#
# =====
# Interfaces to non-Postfix software. Be sure to examine the manual
# pages of the non-Postfix software to find out what options it wants.
# =====
maildrop  unix  -       n       n       -       -       pipe
  flags=DRhu user=vmail argv=/usr/local/bin/maildrop -d ${recipient}
uucp      unix  -       n       n       -       -       pipe
  flags=Fqhu user=uucp argv=uux -r -n -z -a$sender - $nexthop!rmail ($recipient)
ifmail    unix  -       n       n       -       -       pipe
  flags=F user=ftn argv=/usr/lib/ifmail/ifmail -r $nexthop ($recipient)
bsmtp     unix  -       n       n       -       -       pipe
  flags=Fq. user=foo argv=/usr/local/sbin/bsmtp -f $sender $nexthop $recipient
#
# spam/virus section
#
smtp-amavis  unix  -       -       y       -       2       smtp
# -o smtp_data_done_timeout=1200
# -o disable_dns_lookups=yes
# -o smtp_send_xforward_command=yes
127.0.0.1:10025 inet  n       -       y       -       -       smtpd
# -o content_filter=
# -o smtpd_helo_restrictions=
# -o smtpd_sender_restrictions=
# -o smtpd_recipient_restrictions=permit_mynetworks,reject
# -o mynetworks=127.0.0.0/8
# -o smtpd_error_sleep_time=0
# -o smtpd_soft_error_limit=1001
# -o smtpd_hard_error_limit=1000

```

```

-o receive_override_options=no_header_body_checks
-o smtpd_bind_address=127.0.0.1
-o smtpd_helo_required=no
-o smtpd_client_restrictions=
-o smtpd_restriction_classes=
-o disable_vrfy_command=no
-o strict_rfc821_envelopes=yes
#
# Dovecot LDA
dovecot unix - n n - - pipe
 flags=DRhu user=vmail:mail argv=/usr/libexec/dovecot/deliver -d ${recipient}
#
# Vacation mail
vacation unix - n n - - pipe
 flags=Rq user=vacation argv=/var/spool/vacation/vacation.pl -f ${sender} -- $
{recipient}

```

/etc/postfix/mynetworks:

```

# This specifies the list of subnets that Postfix considers as
# "trusted" SMTP clients that have more privileges than "strangers".
#
# In particular, "trusted" SMTP clients are allowed to relay mail
# through Postfix.
#
# Be sure to add your public ip address block if needed.
#
192.168.0.0/16
10.0.0.0/8
127.0.0.0/8

```

The postfix / mysql config files.

/etc/postfix/mysql-virtual_alias_maps.cf :

```

hosts = localhost
user = postfix
password = postfix
dbname = postfix
query = SELECT goto FROM alias WHERE address='%s' AND active = '1'

```

/etc/postfix/mysql-virtual_domains_maps.cf :

```

hosts = localhost
user = postfix
password = postfix
dbname = postfix
query = SELECT domain FROM domain WHERE domain='%s' AND backupmx = '0' AND active =
'1'

```

/etc/postfix/mysql-relay_domains_maps.cf :

```

hosts = localhost
user = postfix
password = postfix
dbname = postfix
query = SELECT domain FROM domain WHERE domain='%s' and backupmx = '1'

```

/etc/postfix/mysql-virtual_mailbox_maps.cf :

```

hosts = localhost

```

```
user = postfix
password = postfix
dbname = postfix
query = SELECT maildir FROM mailbox WHERE username='%s' AND active = '1'
```

/etc/postfix/mysql-virtual_mailbox_limit_maps.cf :

```
hosts = localhost
user = postfix
password = postfix
dbname = postfix
query = SELECT quota FROM mailbox WHERE username='%s' AND active = '1'
```

We need to touch a file. So type the following.

```
> touch /etc/postfix/virtual_regexp
```

- Configure Vacation Email Functionality

Don't forget to fill in your domain name where needed. Type the following:

```
> useradd -r -d /var/spool/vacation -s /sbin/nologin -c "Virtual vacation" vacation
> mkdir /var/spool/vacation
> chmod 770 /var/spool/vacation
> cp /usr/share/postfixadmin/VIRTUAL_VACATION/vacation.pl /var/spool/vacation/
> echo "autoreply.yourdomain.com vacation:" > /etc/postfix/transport
> postmap /etc/postfix/transport
> chown -R vacation:vacation /var/spool/vacation
> echo "127.0.0.1 autoreply.yourdomain.com" >> /etc/hosts
> mkdir /etc/postfixadmin
```

Create /etc/postfixadmin/vacation.conf with the following:

```
# ===== begin configuration =====
$db_type = 'mysql';
$db_username = 'user';
$db_password = 'password';
$db_name = 'postfix';
$vacation_domain = 'autoreply.example.org';
```

- Configuring Dovecot

Now for the dovecot config file. Dovecot now uses multiple config files to break things up. We're going to only use a couple config files. So cut and paste the following files.

```
> mv /etc/dovecot/dovecot.conf /etc/dovecot/dovecot.conf.save
> nano -w /etc/dovecot/dovecot.conf
```

```
##
## Dovecot config file
##

protocols = imap pop3 lmtp sieve
auth_mechanisms = plain login
passdb {
    driver = sql
    args = /etc/dovecot/dovecot-mysql.conf
}
userdb {
    driver = prefetch
}
```

```
userdb {
    driver = sql
    args = /etc/dovecot/dovecot-mysql.conf
}
mail_location = maildir:/home/vmail/%d/%n
first_valid_uid = 101
#last_valid_uid = 0
first_valid_gid = 12
#last_valid_gid = 0
#mail_plugins =
mailbox_idle_check_interval = 30 secs
maildir_copy_with_hardlinks = yes
service imap-login {
    inet_listener imap {
        port = 143
    }
    inet_listener imaps {
        port = 993
        ssl = yes
    }
}
service pop3-login {
    inet_listener pop3 {
        port = 110
    }
    inet_listener pop3s {
        port = 995
        ssl = yes
    }
}
service lmtp {
    unix_listener lmtp {
        #mode = 0666
    }
}
service imap {
    vsz_limit = 256M
}
service pop3 {
}
service auth {
    unix_listener auth-userdb {
        mode = 0666
        user = vmail
        group = mail
    }

    # Postfix smtp-auth
    unix_listener /var/spool/postfix/private/auth {
        mode = 0666
        user = postfix
        group = postfix
    }
}
service auth-worker {
}
service dict {
    unix_listener dict {
        mode = 0666
        user = vmail
        group = mail
    }
}
service managesieve-login {
```



```

inet_listener sieve {
    port = 4190
}
service_count = 1
process_min_avail = 0
vsz_limit = 64M
}
service managesieve {
}
ssl = yes
ssl_cert = </etc/pki/tls/certs/your-server.your-domain.tld.crt
ssl_key = </etc/pki/tls/private/your-server.your-domain.tld.key
ssl_verify_client_cert = no
#ssl_ca =
lda_mailbox_autocreate = yes
lda_mailbox_autosubscribe = yes
protocol lda {
    mail_plugins = quota sieve
    postmaster_address = postmaster@your-domain.tld
}
protocol imap {
    mail_plugins = quota imap_quota trash
    imap_client_workarounds = delay-newmail
}
lmtp_save_to_detail_mailbox = yes
protocol lmtp {
    mail_plugins = sieve
}
protocol pop3 {
    mail_plugins = quota
    pop3_client_workarounds = outlook-no-nuls oe-ns-eoh
}
protocol sieve {
    managesieve_max_line_length = 65536
    managesieve_implementation_string = Dovecot Pigeonhole
    managesieve_max_compile_errors = 5
}
dict {
    quotadict = mysql:/etc/dovecot/dovecot-dict-quota.conf
}
plugin {
    quota = dict:user::proxy::quotadict
    acl = vfile:/etc/dovecot/acls
    trash = /etc/dovecot/trash.conf
    sieve_global_path = /home/sieve/globalfilter.sieve
    sieve = ~/dovecot.sieve
    sieve_dir = ~/sieve
    sieve_global_dir = /home/sieve/
    #sieve_extensions = +notify +imapflags
    sieve_max_script_size = 1M
    #sieve_max_actions = 32
    #sieve_max_redirects = 4
}

```

Now for trash.conf :

```
> nano -w /etc/dovecot/trash.conf
```

```

1 Spam
# Uncomment if you want trash as well
# 2 Trash

```

Next we configure Dovecot to access mysql. Create the following file.

NOTE: password_query and user_query were formatted to fit on the webpage. Each one should only be one line in the file.

/etc/dovecot/dovecot-mysql.conf :

```
driver = mysql
connect = host=localhost dbname=postfix user=postfix password=yourpassword
default_pass_scheme = MD5-CRYPT

# following should all be on one line.
password_query = SELECT username as user, password, concat('/home/vmail/', maildir)
as userdb_home,
concat('maildir:/home/vmail/', maildir) as userdb_mail, 101 as userdb_uid, 12 as
userdb_gid FROM mailbox
WHERE username = '%u' AND active = '1'

# following should all be on one line
user_query = SELECT concat('/home/vmail/', maildir) as home,
concat('maildir:/home/vmail/', maildir) as mail,
101 AS uid, 12 AS gid, CONCAT('*:messages=10000:bytes=', quota) as quota_rule FROM
mailbox WHERE
username = '%u' AND active = '1'
```

/etc/dovecot/dovecot-dict-quota.conf:

```
connect = host=localhost dbname=postfix user=postfix password=password
map {
    pattern = priv/quota/storage
    table = quota2
    username_field = username
    value_field = bytes
}
map {
    pattern = priv/quota/messages
    table = quota2
    username_field = username
    value_field = messages
}
```

Finally set Dovecot to boot at startup.

Now Create the sieve filter for SPAM filtering.

```
> mkdir /home/sieve
> nano -w /home/sieve/globalfilter.sieve
> chown -R vmail:mail /home/sieve
```

```
require "fileinto";
if exists "X-Spam-Flag" {
    if header :contains "X-Spam-Flag" "NO" {
    } else {
        fileinto "Spam";
        stop;
    }
}
if header :contains "subject" ["***SPAM***"] {
    fileinto "Spam";
    stop;
}
```

- Configuring Roundcube mail

Edit the roundcube apache config file to look like the following:

```
>nano -w /etc/httpd/conf.d/roundcubemail.conf
```

```
#
# Round Cube Webmail is a browser-based multilingual IMAP client
#
# Force https here instead of in Round Cube
RewriteEngine On

# This checks to make sure the connection is not already HTTPS
RewriteCond %{HTTPS} !=on

# These rules will redirect all users who are using any part of /secure/ to the same
location but using HTTPS.
# i.e. http://www.example.com/secure/ to https://www.example.com/secure/
RewriteRule ^/?roundcubemail/(.*) https://%{SERVER_NAME}/roundcubemail/$1 [R,L]
RewriteRule ^/?webmail/(.*) https://%{SERVER_NAME}/webmail/$1 [R,L]

Alias /roundcubemail /usr/share/roundcubemail
Alias /webmail /usr/share/roundcubemail

<Directory /usr/share/roundcubemail/>
    Order Deny,Allow
    Deny from all
    Allow from all
    php_value suhosin.session.encrypt Off
</Directory>
```

Create the database for roundcube.

```
> mysql -u root -p -e "CREATE DATABASE roundcubemail;"
```

```
> mysql -u root -p -e "GRANT ALL PRIVILEGES ON roundcubemail.* TO roundcube@localhost
IDENTIFIED BY 'password';"
```

Create the tables.

```
> mysql -u root -p roundcubemail < /usr/share/doc/roundcubemail-<version>/SQL/mysql.initial.sql
```

Edit /etc/roundcubemail/db.inc.php and find the line:

```
$rcmail_config['db_dsnw'] = 'mysql://roundcube:pass@localhost/roundcubemail';
```

Change 'pass' to your password.

Edit /etc/roundcubemail/main.inc.php and find the lines and make the changes below:

find:

```
$rcmail_config['default_host'] = '';
```

change to:

```
$rcmail_config['default_host'] = 'localhost';
```

find:

```
$rcmail_config['smtp_server'] = '';
```

change to:

```
$rcmail_config['smtp_server'] = 'localhost';
```

find:

```
$rcmail_config['force_https'] = false;
```

change to:

```
$rcmail_config['force_https'] = true;
```

find:

```
$rcmail_config['plugins'] = array();
```

change to:

```
$rcmail_config['plugins'] = array('managesieve');
```

find:

```
$rcmail_config['quota_zero_as_unlimited'] = false;
```

change to:

```
$rcmail_config['quota_zero_as_unlimited'] = true;
```

Now lets configure the manage sieve plugin.

```
> cd /usr/share/roundcubemail/plugins/managesieve/
```

```
> cp config.inc.php.dist config.inc.php
```

Edit config.inc.php and change the following:

```
$rcmail_config['managesieve_port'] = 2000;
```

to:

```
$rcmail_config['managesieve_port'] = 4190;
```

Restart apache.

```
> service httpd restart
```

- Be sure your `/etc/hosts` looks similar to the following.

```
# Do not remove the following line, or various programs
```

```
# that require network functionality will fail.
```

```
127.0.0.1      localhost
```

```
192.168.11.21 host.domain.com
```

- Preparing and Testing the Postoffice

First things first. Reboot the system. If everything went well we all should be at the same point.

No errors? Lets keep going.

Setup a test domain and account. Setup your favorit mail client and send some test emails.

- Setting up Spam and Virus Filtering (Optional)

Lets cover installing and configuring spam and virus filtering. Optional? Huh? Some people use a 3rd party or use a seperate server for filtering.

Here's the clamav config file. Replace /etc/clamd.conf with the following:

```
##
## Cconfig file for the Clam AV daemon
## Please read the clamd.conf(5) manual before editing this file.
##

# Logfile
LogFile /var/log/clamav/clamd.log
LogFileMaxSize 20M
LogTime yes
LogSyslog yes

# Pid
PidFile /var/run/clamav/clamd.pid

# Paths
TemporaryDirectory /var/tmp
DatabaseDirectory /var/lib/clamav
LocalSocket /var/run/clamav/clamd

# Sets the group ownership on the unix socket.
# Default: disabled (the primary group of the user running clamd)
#LocalSocketGroup virusgroup

# Misc
FixStaleSocket yes
TCPSocket 3310
TCPAddr 127.0.0.1
MaxConnectionQueueLength 50
MaxThreads 50
ReadTimeout 240
User clamav
AllowSupplementaryGroups yes

# Exe
ScanPE yes
ScanELF yes
DetectBrokenExecutables yes

# Docs
ScanOLE2 yes
ScanPDF yes

# Mail
ScanMail yes
PhishingSignatures yes
PhishingScanURLs yes

# Data Loss Prevention (DLP)

# Enable the DLP module
# Default: No
#StructuredDataDetection yes

# This option sets the lowest number of Credit Card numbers found in a file
# to generate a detect.
```

```
# Default: 3
#StructuredMinCreditCardCount 5

# This option sets the lowest number of Social Security Numbers found
# in a file to generate a detect.
# Default: 3
#StructuredMinSSNCount 5

# With this option enabled the DLP module will search for valid
# SSNs formatted as xxx-yy-zzzz
# Default: yes
#StructuredSSNFormatNormal yes

# With this option enabled the DLP module will search for valid
# SSNs formatted as xxxyyzzzz
# Default: no
#StructuredSSNFormatStripped yes

# Archives
ScanArchive yes
ArchiveBlockEncrypted no
```

Configure Razor. Type the following:

```
> razor-admin -register -user=some_user -pass=somepas
```

Update and restart clamav:

```
> freshclam
> service clamd restart
```

- [Configuring Amavisd-new](#)

You need to edit */etc/amavisd/amavisd.conf*

Here is a list of items you should change. just scroll through the file to find each item.

```
$mydomain = 'example.com'; # set to your domain name
$log_level = 1; # set the log leve to one
$sa_tag_level_deflt = -99; # i want to see the headers so change to -99
$sa_tag2_level_deflt = 5.0; # start with 5
$sa_kill_level_deflt = 9; # change to 9
$sa_dsn_cutoff_level = 9; # change to 9
$sa_quarantine_cutoff_level = 50; # remove the starting # and change to 50
$myhostname = 'lightning.campworld.net'; # remove the starting # and enter your host name
$notify_method = 'smtp:[127.0.0.1]:10025'; # uncomment the line
$forward_method = 'smtp:[127.0.0.1]:10025'; # uncomment the line
$final_banned_destiny = D_DISCARD; # change to D_DISCARD
```

Now enable clamav:
Change the following:

```
# ### http://www.clamav.net/  
# ['ClamAV-clamd',  
#  \&ask_daemon, ["CONTSCAN {}\n", "/var/run/clamav/clamd"],  
#  qr/\bOK$/m, qr/\bFOUND$/m,  
#  qr/^.*?: (?!Infected Archive)(.*) FOUND$/m ],
```

to

```
### http://www.clamav.net/  
['ClamAV-clamd',  
 \&ask_daemon, ["CONTSCAN {}\n", "/var/run/clamav/clamd"],  
 qr/\bOK$/m, qr/\bFOUND$/m,  
 qr/^.*?: (?!Infected Archive)(.*) FOUND$/m ],
```

Now update spamassassin and start amavisd-new.

```
> sa-update  
> service amavisd-new start
```

Be sure to set amavisd-new to start at boot.

- Telling Postfix to Start Filtering SPAM

To get postfix going we need to un-comment a couple lines in /etc/postfix/master.cf
Find:

```
smtp      inet  n       -       n       -       -       smtpd  
# -o content_filter=smtp-amavis:127.0.0.1:10024  
# -o receive_override_options=no_address_mappings
```

Change to:

```
smtp      inet  n       -       n       -       -       smtpd  
-o content_filter=smtp-amavis:127.0.0.1:10024  
-o receive_override_options=no_address_mappings
```

Restart postfix and you're done.!

- Using The Roundcubemail Password Plugin (Optional)

Let your users change their password using roundcubemail instead of postfixadmin.
Edit /etc/roundcubemail/main.inc.php and find the lines and make the changes below:
find:

```
$rcmail_config['plugins'] = array('managesieve');
```

change to:

```
$rcmail_config['plugins'] = array('managesieve', 'password');
```

Now lets configure the password plugin.

```
> cd /usr/share/roundcubemail/plugins/password/  
> cp config.inc.php.dist config.inc.php
```

Edit config.inc.php

find:

```
$rcmail_config['password_db_dsn'] = '';
```

change to:

```
$rcmail_config['password_db_dsn'] = 'mysql://postfix:your-postfixadmin-  
password@localhost/postfix';
```

find:

```
$rcmail_config['password_query'] = 'SELECT update_passwd(%c, %u)';
```

change to:

```
$rcmail_config['password_query'] = 'UPDATE mailbox SET password=%c WHERE username=%u  
limit 1;';
```

Restart apache.

```
> service httpd restart
```