

Lightweight, secure, database-free, spamfiltering mail server with Postfix, Dovecot, openDKIM and dspam on Debian 7

Configurations for a light memory use, spamfiltering, secure
mailserver on linux.

Update 2016-03-08

I wasn't aware Dovecot is case-sensitive by default and this led to strange situations. Many thanks to the entry Roundcube, Dovecot IMAP and case sensitive user names[¹] for pointing at the solution.

Update 2014-11-06

It turned out that the hash segment size was misconfigured earlier and it resulted in filled up disk space. Fixed now. Also replaced CRYPT with SHA512-CRYPT.

Forewords

I've been using this setup with MySQL as a backend for years; I've moved away from the database approach for various reasons recently. One of them was to be able to easily sync the whole server for a secondary place where the MySQL replication constantly failed due to a somewhat flaky connection.

If you have a small, rarely changing system, just stick to the plain text configs.

Disclaimer

Although I'm using this setup it does not necessarily mean it will work flawlessly for you. This little tutorial is provided without any warranty or even promise that it will fit your needs.

Even though I've tried to create a copy-paste tutorial here things might be missing. If you find any goofs, please drop me a mail or similar.

Prerequisites

Create a user for the virtual mailboxes:

```
addgroup --gid 5000 vmmail
adduser --uid 5000 --home /home/vmail --gid vmmail --disabled-
password vmmail
```

Install the required software:

```
apt-get install dspam libdspam7-drv-hash opendkim
opendkim-tools memcached postfix postfix-pcre dovecot-
antispam dovecot-core dovecot-imapd dovecot-managesieved
dovecot-sieve
```

bash

During the process, postfix will ask for its configuration; it does not matter what you choose as it will be overwritten.

Postfix

Generate dhparam files for SPF:

```
cd /etc/postfix
openssl dhparam -out dh2048.tmp 2048 && mv dh2048.tmp
dh2048.pem
openssl dhparam -out dh1024.tmp 2048 && mv dh1024.tmp
dh1024.pem
openssl dhparam -out dh512.tmp 2048 && mv dh512.tmp dh512.pem
```

bash

/etc/postfix/main.cf

```
smtpd_banner = your.mailhost.reverse.dns
biff = no
append_dot_mydomain = no
delay_warning_time = 4h
readme_directory = no
mailbox_size_limit = 0
message_size_limit = 52428800
#recipient_delimiter = +
inet_interfaces = all
maximal_queue_lifetime = 1d
queue_run_delay = 300s
minimal_backoff_time = 300s
bounce_queue_lifetime = 1d
myhostname = your.mailhost.reverse.dns
myorigin = your.mailhost.reverse.dns
mydestination = $myhostname localhost localhost.localdomain
mynetworks = 127.0.0.0/8 [::ffff:127.0.0.0]/104 [::1]/128

virtual_mailbox_domains = hash:/etc/postfix/maps/domain
virtual_mailbox_maps = hash:/etc/postfix/maps/mailbox
virtual_alias_domains = hash:/etc/postfix/maps/aliasdomain
virtual_alias_maps = hash:/etc/postfix/maps/alias

virtual_mailbox_base = /home/vmail
virtual_uid_maps = static:5000
```

apache

```
virtual_gid_maps = static:5000

virtual_transport=dovecot

dovecot_destination_recipient_limit = 1
dspam_destination_recipient_limit = 1

## TLS & SSL
smtp_use_tls=yes
smtpd_use_tls=yes
smtpd_tls_security_level = may
smtpd_tls_received_header = yes
tls_random_source = dev:/dev/urandom

smtpd_tls_cert_file = /etc/ssl/your.domain.cert.pem
smtpd_tls_key_file = /etc/ssl/your.domain.cert.key

smtpd_tls_session_cache_timeout = 3600s
smtpd_tls_session_cache_database = btree:${data_directory}/
smtpd_scache

smtpd_sasl_auth_enable = yes
smtpd_sasl_security_options = noanonymous
broken_sasl_auth_clients = yes
smtpd_sasl_authenticated_header = yes
smtpd_sasl_type = dovecot
smtpd_sasl_path = private/auth

smtpd_tls_ciphers = high
smtpd_tls_exclude_ciphers = aNULL, DES, 3DES, MD5, DES+MD5,
RC4
smtpd_tls_protocols = !SSLv3, !SSLv2

# forward secrecy
smtpd_tls_eecdh_grade = strong
tls_eecdh_strong_curve = prime256v1
tls_eecdh_ultra_curve = secp384r1
smtpd_tls_dh1024_param_file = ${config_directory}/dh2048.pem
smtpd_tls_dh512_param_file = ${config_directory}/dh512.pem
tls_preempt_cipherlist = yes
```



```
## POSTSCREEN
```

```
postscreen_access_list = permit_mynetworks  
postscreen_dnsbl_sites = ix.dnsbl.manitu.net*1  
zen.spamhaus.org*2 dnsbl-1.uceprotect.net*1  
smtp.dnsbl.sorbs.net*1 web.dnsbl.sorbs.net*1
```

```
postscreen_dnsbl_action = enforce
```

```
postscreen_greet_action = enforce
```

```
postscreen_cache_map = memcache:/etc/postfix/postscreen_cache
```

```
postscreen_cache_cleanup_interval = 0
```

```
postscreen_dnsbl_ttl = 60m
```

```
smtpd_helo_required = yes
```

```
smtpd_client_restrictions = permit_mynetworks,  
    permit_sasl_authenticated
```

```
smtpd_helo_restrictions = permit_mynetworks,  
    reject_invalid_helo_hostname,  
    permit
```

```
smtpd_sender_restrictions = reject_unknown_sender_domain,  
    check_sender_mx_access pcre:/etc/postfix/regex_blacklist,  
    check_sender_access pcre:/etc/postfix/regex_blacklist,  
    check_sender_ns_access pcre:/etc/postfix/regex_blacklist,  
    permit
```

```
smtpd_recipient_restrictions =    permit_mynetworks,  
    permit_sasl_authenticated,  
    reject_invalid_hostname,  
    reject_non_fqdn_recipient,  
    reject_unknown_recipient_domain,  
    reject_unauth_pipelining,  
    reject_unauth_destination,  
    check_client_access pcre:/etc/postfix/dspam_filter_access,  
    permit
```

```
# DKIM
```

```
milter_default_action = accept
```

```
milter_protocol = 2
```

```
smtpd_milters = inet:127.0.0.1:8891
non_smtpd_milters = inet:127.0.0.1:8891
```

/etc/postfix/master.cf

smtpd	pass	-	-	n	-	-	apache
smtpd							
smtp	inet	n	-	n	-	1	
postscreen							
smtps	inet	n	-	-	-	-	smtpd
587	inet	n	-	-	-	-	smtpd
tlsproxy	unix	-	-	n	-	0	
tlsproxy							
dnsblog	unix	-	-	n	-	0	
dnsblog							
#smtp	inet	n	-	-	-	-	smtpd
pickup	fifo	n	-	-	60	1	pickup
cleanup	unix	n	-	-	-	0	
cleanup							
qmgr	fifo	n	-	n	300	1	qmgr
tlsmgr	unix	-	-	-	1000?	1	tlsmgr
rewrite	unix	-	-	-	-	-	
trivial-rewrite							
bounce	unix	-	-	-	-	0	bounce
defer	unix	-	-	-	-	0	bounce
trace	unix	-	-	-	-	0	bounce
verify	unix	-	-	-	-	1	verify
flush	unix	n	-	-	1000?	0	flush
proxymap	unix	-	-	n	-	-	
proxymap							
proxywrite	unix	-	-	n	-	1	
proxymap							
smtp	unix	-	-	-	-	-	smtp
relay	unix	-	-	-	-	-	smtp
showq	unix	n	-	-	-	-	showq
error	unix	-	-	-	-	-	error
retry	unix	-	-	-	-	-	error
discard	unix	-	-	-	-	-	

```

discard
local    unix  -      n      n      -      -      local
virtual  unix  -      n      n      -      -
virtual
lmtpl    unix  -      -      -      -      -      lmtpl
anvil    unix  -      -      -      -      1      anvil
scache   unix  -      -      -      -      1      scache

dovecot  unix  -      n      n      -      -      pipe
  flags=DRhu user=vmail:vmail argv=/usr/lib/dovecot/deliver -
  f ${sender} -d ${recipient}

dspam    unix  -      n      n      -      32     pipe
  flags=Ru user=vmail:vmail argv=/usr/bin/dspam --client --
  deliver=innocent,spam --user ${recipient} --mail-from=${
  {sender}

127.0.0.1:25025 inet n      -      n      -      -      smtpd
  -o content_filter=
  -o
receive_override_options=no_unknown_recipient_checks,no_header_
  body_checks
  -o smtpd_helo_restrictions=
  -o smtpd_client_restrictions=
  -o smtpd_sender_restrictions=
  -o smtpd_recipient_restrictions=permit_mynetworks,reject
  -o mynetworks=127.0.0.0/8,192.168.42.0/24
  -o
smtpd_authorized_xforward_hosts=127.0.0.0/8,192.168.42.0/24

```

The alternative 25025 port is for the DSPAM delivery agent that will send the message back once it's done.

`/etc/postfix/postscreen_cache`

Postscreen can be rather slow, so a cache does not really matter; memcached is easy enough to set up and it's built-in already.

```

memcache = inet:127.0.0.1:11211
key_format = postscreen:%s

```

apache

`/etc/postfix/dspam_filter_access`

The dspam filter access file is to tell which master.cf route to use as name:filter_route format.

```
# Everything beginning with either ham or spam avoids
the filter
/^(spam|ham)@.*$/ OK

# The rest is redirected to be filtered
./ FILTER dspam:dspam
```

apache

`/etc/postfix/regex_blacklist`

The regex blacklist file contains domain names you explicitly want to send to hell. It's useful when you receive spams from directions easy to define by sender domain.

```
/gigaplaza\.sk$/ REJECT Byez
```

apache

Mappings

`/etc/postfix/maps/alias`

If you need virtual aliases.

```
abuse@your.other.domain      abuse@your.domain
hostmaster@your.other.domain  hostmaster@your.domain
postmaster@your.other.domain  postmaster@your.domain
webmaster@your.other.domain   webmaster@your.domain
```

apache

`/etc/postfix/maps/aliasdomain`

If you want to use virtual alias domains.

```
your.other2.domain your.domain
```

apache

`/etc/postfix/maps/domain`

Domains you want to accept mail for.

```
your.domain  
your.other.domain
```

apache

`/etc/postfix/maps/mailbox`

Virtual mailboxes. The `the_directory_name_for_the_address` will be created under the `virtual_mailbox_base` specified in `main.cf`.

```
you@your.domain the_directory_name_for_the_address/
```

apache

`/etc/postfix/maps/user`

This will be the password file for dovecot. Since we're not using local users, we need a virtual users table.

```
you@your.domain:SHA512_hashed_password_for_the_mailbox
```

apache

For a hashed password:

```
mkpasswd --method=sha-512
```

bash

memcached

Just install memcached with the defaults; no need for any changes in the configuration.

dspam

Dspam needs a lot of training, but once trained enough, it's dead accurate, small and fast.

`/etc/dspam/default.prefs`

```
trainingMode=TEFT
spamAction=deliver
spamSubject=
enableBNR=on
enableWhitelist=on
statisticalSedation=5
signatureLocation=headers
whitelistThreshold=10
showFactors=off
optIn=off
optOut=off
```

apache

`/etc/dspam/dspam.conf`

```
Home /var/spool/dspam

StorageDriver /usr/lib/x86_64-linux-gnu/dspam/libhash_drv.so
HashRecMax 49157
HashAutoExtend on
HashMaxExtents 1024
HashExtentSize 49157
HashPctIncrease 10
HashMaxSeek 10
HashConnectionCache 20

TrustedDeliveryAgent "/usr/sbin/sendmail"
UntrustedDeliveryAgent "/usr/lib/dovecot/deliver -d %u"

DeliveryHost 127.0.0.1
DeliveryPort 25025
```

```
DeliveryIdent      dspam.your.mailhost.reverse.dns
DeliveryProto      SMTP

OnFail error

Trust root
Trust dspam
Trust postfix
Trust vmail
Trust dspam-user

# Debug *

TrainingMode teft
TestConditionalTraining on
Feature tb=3

Algorithm graham burton
Tokenizer osb
PValue bcr

WebStats on

ImprobabilityDrive on

Preference "signatureLocation=headers"
Preference "showFactors=off"
Preference "spamAction=deliver"
Preference "spamSubject="
Preference "optIn=off"
Preference "optOut=off"

Notifications      off

PurgeSignatures 14      # Stale signatures
PurgeNeutral     90      # Tokens with neutralish probabilities
PurgeUnused      90      # Unused tokens
PurgeHapaxes     30      # Tokens with less than 5 hits (hapaxes)
PurgeHits1S      15      # Tokens with only 1 spam hit
PurgeHits1I      15      # Tokens with only 1 innocent hit
```


LocalMX 192.168.1.0/24 127.0.0.1

SystemLog on
UserLog on

TrainPristine off

Opt out

TackSources spam virus

ParseToHeaders on
ChangeModeOnParse on
ChangeUserOnParse full

MaxMessageSize 4194304

ServerHost 127.0.0.1
ServerPort 2424
ServerQueueSize 32
ServerPID /var/run/dspam/dspam.pid
ServerMode auto

ServerPass.client "a_random_client_id"

ServerParameters "--deliver=innocent,spam -d %u"
ServerIdent "your.hostname"

ClientHost 127.0.0.1
ClientPort 2424
ClientIdent "a_random_client_id@client"

ProcessorURLContext on
ProcessorBias on
StripRcptDomain off

IgnoreHeader Accept-Language
IgnoreHeader Approved
IgnoreHeader Archive
IgnoreHeader Authentication-Results
IgnoreHeader Cache-Post-Path

IgnoreHeader Cancel-Key
IgnoreHeader Cancel-Lock
IgnoreHeader Complaints-To
IgnoreHeader Content-Description
IgnoreHeader Content-Disposition
IgnoreHeader Content-ID
IgnoreHeader Content-Language
IgnoreHeader Content-Return
IgnoreHeader Content-Transfer-Encoding
IgnoreHeader Content-Type
IgnoreHeader DKIM-Signature
IgnoreHeader Date
IgnoreHeader Disposition-Notification-To
IgnoreHeader DomainKey-Signature
IgnoreHeader Importance
IgnoreHeader In-Reply-To
IgnoreHeader Injection-Info
IgnoreHeader Lines
IgnoreHeader Message-Id
IgnoreHeader Message-ID
IgnoreHeader NNTP-Posting-Date
IgnoreHeader NNTP-Posting-Host
IgnoreHeader Newsgroups
IgnoreHeader OpenPGP
IgnoreHeader Organization
IgnoreHeader Originator
IgnoreHeader PGP-ID
IgnoreHeader Path
IgnoreHeader Received
IgnoreHeader Received-SPF
IgnoreHeader References
IgnoreHeader Reply-To
IgnoreHeader Resent-Date
IgnoreHeader Resent-From
IgnoreHeader Resent-Message-ID
IgnoreHeader Thread-Index
IgnoreHeader Thread-Topic
IgnoreHeader User-Agent
IgnoreHeader X--MailScanner-SpamCheck
IgnoreHeader X-AV-Scanned
IgnoreHeader X-AVAS-Spam-Level

IgnoreHeader X-AVAS-Spam-Score
IgnoreHeader X-AVAS-Spam-Status
IgnoreHeader X-AVAS-Spam-Symbols
IgnoreHeader X-AVAS-Virus-Status
IgnoreHeader X-AVK-Virus-Check
IgnoreHeader X-Abuse
IgnoreHeader X-Abuse-Contact
IgnoreHeader X-Abuse-Info
IgnoreHeader X-Abuse-Management
IgnoreHeader X-Abuse-To
IgnoreHeader X-Abuse-and-DMCA-Info
IgnoreHeader X-Accept-Language
IgnoreHeader X-Admission-MailScanner-SpamCheck
IgnoreHeader X-Admission-MailScanner-SpamScore
IgnoreHeader X-Amavis-Alert
IgnoreHeader X-Amavis-Hold
IgnoreHeader X-Amavis-Modified
IgnoreHeader X-Amavis-OS-Fingerprint
IgnoreHeader X-Amavis-PenPals
IgnoreHeader X-Amavis-PolicyBank
IgnoreHeader X-AntiVirus
IgnoreHeader X-Antispam
IgnoreHeader X-Antivirus
IgnoreHeader X-Antivirus-Scanner
IgnoreHeader X-Antivirus-Status
IgnoreHeader X-Archive
IgnoreHeader X-Assp-Spam-Prob
IgnoreHeader X-Attention
IgnoreHeader X-BTI-AntiSpam
IgnoreHeader X-Barracuda
IgnoreHeader X-Barracuda-Bayes
IgnoreHeader X-Barracuda-Spam-Flag
IgnoreHeader X-Barracuda-Spam-Report
IgnoreHeader X-Barracuda-Spam-Score
IgnoreHeader X-Barracuda-Spam-Status
IgnoreHeader X-Barracuda-Virus-Scanned
IgnoreHeader X-Bogosity
IgnoreHeader X-Brightmail-Tracker
IgnoreHeader X-CRM114-CacheID
IgnoreHeader X-CRM114-Status
IgnoreHeader X-CRM114-Version

IgnoreHeader X-CTASD-IP
IgnoreHeader X-CTASD-RefID
IgnoreHeader X-CTASD-Sender
IgnoreHeader X-Cache
IgnoreHeader X-ClamAntiVirus-Scanner
IgnoreHeader X-Comment-To
IgnoreHeader X-Comments
IgnoreHeader X-Complaints
IgnoreHeader X-Complaints-Info
IgnoreHeader X-Complaints-To
IgnoreHeader X-DKIM
IgnoreHeader X-DMCA-Complaints-To
IgnoreHeader X-DMCA-Notifications
IgnoreHeader X-Despammed-Tracer
IgnoreHeader X-ELTE-SpamCheck
IgnoreHeader X-ELTE-SpamCheck-Details
IgnoreHeader X-ELTE-SpamScore
IgnoreHeader X-ELTE-SpamVersion
IgnoreHeader X-ELTE-VirusStatus
IgnoreHeader X-Enigmail-Supports
IgnoreHeader X-Enigmail-Version
IgnoreHeader X-Extra-Info
IgnoreHeader X-Face
IgnoreHeader X-Forwarded
IgnoreHeader X-GMX-Antispam
IgnoreHeader X-GMX-Antivirus
IgnoreHeader X-GPG-Fingerprint
IgnoreHeader X-GPG-Key-ID
IgnoreHeader X-GPS-DegDec
IgnoreHeader X-GPS-MGRS
IgnoreHeader X-GWSPAM
IgnoreHeader X-Gateway
IgnoreHeader X-Greylist
IgnoreHeader X-HTMLM
IgnoreHeader X-HTMLM-Info
IgnoreHeader X-HTMLM-Score
IgnoreHeader X-HTTP-Posting-Host
IgnoreHeader X-HTTP-UserAgent
IgnoreHeader X-HTTP-Via
IgnoreHeader X-ID
IgnoreHeader X-IMAIL-SPAM-STATISTICS

IgnoreHeader X-IMAIL-SPAM-URL-DBL
IgnoreHeader X-IMAIL-SPAM-VALFROM
IgnoreHeader X-IMAIL-SPAM-VALHELO
IgnoreHeader X-IMAIL-SPAM-VALREVDNS
IgnoreHeader X-Info
IgnoreHeader X-IronPort-Anti-Spam-Filtered
IgnoreHeader X-IronPort-Anti-Spam-Result
IgnoreHeader X-KSV-Antispam
IgnoreHeader X-Kaspersky-Antivirus
IgnoreHeader X-MDAV-Processed
IgnoreHeader X-MDRemoteIP
IgnoreHeader X-MDaemon-Deliver-To
IgnoreHeader X-MIE-MailScanner-SpamCheck
IgnoreHeader X-MIMEOLE
IgnoreHeader X-MIMETrack
IgnoreHeader X-MMS-Spam-Filter-ID
IgnoreHeader X-MS-Has-Attach
IgnoreHeader X-MS-TNEF-Correlator
IgnoreHeader X-MSMail-Priority
IgnoreHeader X-MailScanner
IgnoreHeader X-MailScanner-Information
IgnoreHeader X-MailScanner-SpamCheck
IgnoreHeader X-Mailer
IgnoreHeader X-Mlf-Spam-Status
IgnoreHeader X-NAI-Spam-Checker-Version
IgnoreHeader X-NAI-Spam-Flag
IgnoreHeader X-NAI-Spam-Level
IgnoreHeader X-NAI-Spam-Report
IgnoreHeader X-NAI-Spam-Route
IgnoreHeader X-NAI-Spam-Rules
IgnoreHeader X-NAI-Spam-Score
IgnoreHeader X-NAI-Spam-Threshold
IgnoreHeader X-NEWT-spamscore
IgnoreHeader X-NNTP-Posting-Date
IgnoreHeader X-NNTP-Posting-Host
IgnoreHeader X-NetcoreISpam1-ECMScanner
IgnoreHeader X-NetcoreISpam1-ECMScanner-From
IgnoreHeader X-NetcoreISpam1-ECMScanner-Information
IgnoreHeader X-NetcoreISpam1-ECMScanner-SpamCheck
IgnoreHeader X-NetcoreISpam1-ECMScanner-SpamScore
IgnoreHeader X-Newsreader

IgnoreHeader X-Newsserver
IgnoreHeader X-No-Archive
IgnoreHeader X-No-Spam
IgnoreHeader X-OSBF-Lua-Score
IgnoreHeader X-OWM-SpamCheck
IgnoreHeader X-OWM-VirusCheck
IgnoreHeader X-Olypen-Virus
IgnoreHeader X-Orig-Path
IgnoreHeader X-OriginalArrivalTime
IgnoreHeader X-Originating-IP
IgnoreHeader X-PAA-AntiVirus
IgnoreHeader X-PAA-AntiVirus-Message
IgnoreHeader X-PGP-Fingerprint
IgnoreHeader X-PGP-Hash
IgnoreHeader X-PGP-ID
IgnoreHeader X-PGP-Key
IgnoreHeader X-PGP-Key-Fingerprint
IgnoreHeader X-PGP-KeyID
IgnoreHeader X-PGP-Sig
IgnoreHeader X-PIRONET-NDH-MailScanner-SpamCheck
IgnoreHeader X-PIRONET-NDH-MailScanner-SpamScore
IgnoreHeader X-PMX
IgnoreHeader X-PMX-Version
IgnoreHeader X-PN-SPAMFiltered
IgnoreHeader X-Posting-Agent
IgnoreHeader X-Posting-ID
IgnoreHeader X-Posting-IP
IgnoreHeader X-Priority
IgnoreHeader X-Proofpoint-Spam-Details
IgnoreHeader X-Qmail-Scanner-1.25st
IgnoreHeader X-Quarantine-ID
IgnoreHeader X-RAV-AntiVirus
IgnoreHeader X-RITmySpam
IgnoreHeader X-RITmySpam-IP
IgnoreHeader X-RITmySpam-Spam
IgnoreHeader X-Rc-Spam
IgnoreHeader X-Rc-Virus
IgnoreHeader X-Received-Date
IgnoreHeader X-RedHat-Spam-Score
IgnoreHeader X-RedHat-Spam-Warning
IgnoreHeader X-RegEx

IgnoreHeader X-RegEx-Score
IgnoreHeader X-Rocket-Spam
IgnoreHeader X-SA-GROUP
IgnoreHeader X-SA-RECEIPTSTATUS
IgnoreHeader X-STA-NotSpam
IgnoreHeader X-STA-Spam
IgnoreHeader X-Scam-grey
IgnoreHeader X-Scanned-By
IgnoreHeader X-SenderID
IgnoreHeader X-Sohu-Antivirus
IgnoreHeader X-Spam
IgnoreHeader X-Spam-ASN
IgnoreHeader X-Spam-Check
IgnoreHeader X-Spam-Checked-By
IgnoreHeader X-Spam-Checker
IgnoreHeader X-Spam-Checker-Version
IgnoreHeader X-Spam-Clean
IgnoreHeader X-Spam-DCC
IgnoreHeader X-Spam-Details
IgnoreHeader X-Spam-Filter
IgnoreHeader X-Spam-Filtered
IgnoreHeader X-Spam-Flag
IgnoreHeader X-Spam-Level
IgnoreHeader X-Spam-OrigSender
IgnoreHeader X-Spam-Pct
IgnoreHeader X-Spam-Prev-Subject
IgnoreHeader X-Spam-Processed
IgnoreHeader X-Spam-Pyzor
IgnoreHeader X-Spam-Rating
IgnoreHeader X-Spam-Report
IgnoreHeader X-Spam-Scanned
IgnoreHeader X-Spam-Score
IgnoreHeader X-Spam-Status
IgnoreHeader X-Spam-Tagged
IgnoreHeader X-Spam-Tests
IgnoreHeader X-Spam-Tests-Failed
IgnoreHeader X-Spam-Virus
IgnoreHeader X-Spam-Warning
IgnoreHeader X-Spam-detection-level
IgnoreHeader X-SpamAssassin-Clean
IgnoreHeader X-SpamAssassin-Warning

IgnoreHeader X-SpamBouncer
IgnoreHeader X-SpamCatcher-Score
IgnoreHeader X-SpamCop-Checked
IgnoreHeader X-SpamCop-Disposition
IgnoreHeader X-SpamCop-Whitelisted
IgnoreHeader X-SpamDetected
IgnoreHeader X-SpamInfo
IgnoreHeader X-SpamPal
IgnoreHeader X-SpamPal-Timeout
IgnoreHeader X-SpamReason
IgnoreHeader X-SpamScore
IgnoreHeader X-SpamTest-Categories
IgnoreHeader X-SpamTest-Info
IgnoreHeader X-SpamTest-Method
IgnoreHeader X-SpamTest-Status
IgnoreHeader X-SpamTest-Version
IgnoreHeader X-Spamadvice
IgnoreHeader X-Spamarrest-noauth
IgnoreHeader X-Spamarrest-speedcode
IgnoreHeader X-Spambayes-Classification
IgnoreHeader X-Spamcount
IgnoreHeader X-Spamsensitivity
IgnoreHeader X-TERRACE-SPAMMARK
IgnoreHeader X-TERRACE-SPAMRATE
IgnoreHeader X-TM-AS-Category-Info
IgnoreHeader X-TM-AS-MatchedID
IgnoreHeader X-TM-AS-Product-Ver
IgnoreHeader X-TM-AS-Result
IgnoreHeader X-TMWD-Spam-Summary
IgnoreHeader X-TNEFEvaluated
IgnoreHeader X-Text-Classification
IgnoreHeader X-Text-Classification-Data
IgnoreHeader X-Trace
IgnoreHeader X-UCD-Spam-Score
IgnoreHeader X-User-Agent
IgnoreHeader X-User-ID
IgnoreHeader X-User-System
IgnoreHeader X-Virus-Check
IgnoreHeader X-Virus-Checked
IgnoreHeader X-Virus-Checker-Version
IgnoreHeader X-Virus-Scan


```
IgnoreHeader X-Virus-Scanned
IgnoreHeader X-Virus-Scanner
IgnoreHeader X-Virus-Scanner-Result
IgnoreHeader X-Virus-Status
IgnoreHeader X-VirusChecked
IgnoreHeader X-Virusscan
IgnoreHeader X-WSS-ID
IgnoreHeader X-WinProxy-AntiVirus
IgnoreHeader X-WinProxy-AntiVirus-Message
IgnoreHeader X-cid
IgnoreHeader X-iHateSpam-Checked
IgnoreHeader X-iHateSpam-Quarantined
IgnoreHeader X-policyd-weight
IgnoreHeader X-purgate
IgnoreHeader X-purgate-Ad
IgnoreHeader X-purgate-ID
IgnoreHeader X-sgxhl
IgnoreHeader X-to-viruscore
IgnoreHeader Xref
IgnoreHeader acceptlanguage
IgnoreHeader thread-index
IgnoreHeader x-uscspam
IgnoreHeader X-Paranoid-Spam
IgnoreHeader X-Paranoid-Prob
IgnoreHeader X-Paranoid-Report
IgnoreHeader X-ArGoMail-Read
```

/etc/default/dspam

```
START=yes
USER=dspam
OPTIONS=""
RUN_NOTIFY="no"
```

apache

Dovecot

`/etc/dovecot/dovecot.conf`

Main dovecot config file; not too many things to see here.

apache

```
## Dovecot configuration file

# Enable installed protocols
!include_try /usr/share/dovecot/protocols.d/*.protocol
listen = *, ::
instance_name = dovecot
login_greeting = mail
shutdown_clients = yes
default_vsz_limit = 64M
default_internal_user = vmail
!include conf.d/*.conf
```

`/etc/dovecot/conf.d/10-auth.conf`

Dovecot authentication setup; this will provide the auth socket for Postfix as well.

apache

```
##
## Authentication processes
##

# plain login digest-md5 cram-md5 ntlm rpa apop anonymous
gssapi otp skey
# gss-spnego
auth_cache_size = 1024
auth_cache_ttl = 1 hour
auth_cache_negative_ttl = 1 hour
auth_worker_max_count = 128
auth_mechanisms = plain login
auth_username_format = %Lu
```

```
##
## Password and user databases
##

passdb {
    driver = passwd-file
    args = scheme=SHA512-CRYPT /etc/postfix/maps/user
}

userdb {
    driver = static
    args = uid=5000 gid=5000 home=/home/vmail/%Lu
}

service auth {
    user = root

    unix_listener auth-userdb {
        mode = 0666
        user = $default_internal_user
        group = $default_internal_user
    }

    # Postfix smtp-auth
    unix_listener /var/spool/postfix/private/auth {
        mode = 0666
        user = postfix
        group = postfix
    }
}

service auth-worker {
    user = $default_internal_user
}
```

`/etc/dovecot/conf.d/10-logging.conf`

Set logging to syslog so you'll have it all in one place.

```
##
## Log destination.
##

log_path = syslog
syslog_facility = mail

##
## Logging verbosity and debugging.
##

auth_verbose = no
auth_verbose_passwords = no
auth_debug = no
auth_debug_passwords = no

mail_debug = no
verbose_ssl = no

##
## Log formatting.
##

log_timestamp = "%Y-%m-%d %H:%M:%S "

# Format to use for logging mail deliveries. You can use
variables:
#  %$ - Delivery status message (e.g. "saved to INBOX")
#  %m - Message-ID
#  %s - Subject
#  %f - From address
#  %p - Physical size
#  %w - Virtual size
deliver_log_format = msgid=%m: %$
```

`/etc/dovecot/conf.d/10-mail.conf`

Mailbox setup.

```
##
## Mailbox locations and namespaces
##

mail_location = maildir:~/Maildir

namespace inbox {
    inbox = yes

    mailbox Drafts {
        special_use = \Drafts
    }

    mailbox Spam {
        special_use = \Junk
    }

    mailbox Trash {
        special_use = \Trash
    }

    mailbox Sent {
        special_use = \Sent
    }
}

mail_privileged_group = mail
```

`/etc/dovecot/conf.d/10-ssl.conf`

Security for dovecot.

```
##
## SSL settings
##

ssl = yes

ssl_cert = </etc/ssl/your.domain.cert.pem
ssl_key  = </etc/ssl/your.domain.cert.key
```

```
# SSL protocols to use
ssl_protocols = !SSLv2 !SSLv3

# SSL ciphers to use
ssl_cipher_list = ECDHE-RSA-AES128-GCM-SHA256:ECDHE-RSA-
AES128-SHA:AES128-GCM-SHA256:AES128-SHA:HIGH:!ADH:!EXP:!LOW:!
RC2:!3DES:!SEED:!MD5:!aNULL:!EDH:!CAMELLIA:!MEDIUM:!RC4:!
eNULL;

# SSL crypto device to use, for valid values run "openssl
engine"
ssl_crypto_device = rsax
```

`/etc/dovecot/conf.d/15-lda.conf`

Local delivery agent setup

```
##
## LDA specific settings (also used by LMTP)
##

postmaster_address = postmaster@your.domain
hostname = your.hostname

rejection_subject = Rejected: %s
rejection_reason = Message <%t> was rejected:%n%r

lda_mailbox_autocreate = yes
lda_mailbox_autosubscribe = yes

protocol lda {
    log_path = syslog
    mail_plugins = $mail_plugins sieve
    mail_fsync = optimized
}
```

apache

`/etc/dovecot/conf.d/20-imap.conf`

The IMAP server setup itself.

apache

```
##
## IMAP specific settings
##

protocol imap {
    mail_max_userip_connections = 512
    imap_idle_notify_interval = 24 mins
    mail_plugins = $mail_plugins antispam
}

service imap-login {
    # enabled if you want non-ssl imap
    #inet_listener imap {
    #     port = 143
    #}

    inet_listener imaps {
        port = 993
        ssl = yes
    }
}

service imap {
#     process_limit = 64
}
```

`/etc/dovecot/conf.d/20-lmtp.conf`

apache

```
##
## LMTP specific settings
##

protocol lmtp {
    #auth_socket_path = director-userdb
    mail_fsync = optimized
}
```

```
mail_plugins = $mail_plugins sieve
}

service lmtp {
    user = vmail

    unix_listener lmtp {
        mode = 0666
    }

    inet_listener lmtp {
        address = 127.0.0.1
        port = 24
    }
}
```

`/etc/dovecot/conf.d/20-managesieve.conf`

Sieve setup. Create the folder and the file before running dovecot with this setup:

```
mkdir /etc/dovecot/sieve
touch /etc/dovecot/sieve/sieve.before
touch /etc/dovecot/sieve/sieve.default
chown -R vmail:vmail /etc/dovecot/sieve
```

bash

```
##
## ManageSieve specific settings
##

# Service configuration

protocol sieve {
    #managesieve_max_line_length = 65536
}

# Service definitions
service managesieve-login {
    inet_listener sieve {
        port = 4190
    }
}
```

apache


```

    }

    inet_listener sieve_deprecated {
        port = 2000
    }
}

service managesieve {
    # process_count = 32
}

plugin {
    # The path to the user's main active script. If
    ManageSieve is used, this the
    # location of the symbolic link controlled by ManageSieve.
    sieve = ~/.dovecot.sieve
    sieve_default = /etc/dovecot/sieve/sieve.default
    sieve_dir = ~/sieve
    sieve_global_dir = /etc/dovecot/sieve
    sieve_before = /etc/dovecot/sieve/sieve.before

    sieve_max_actions = 1024
}

```

`/etc/dovecot/conf.d/80-antispam.conf`

Dspam can hook in to dovecot so there's no need for any manual train; when a mail is moved in our out the Spam folder, dspam will automatically be trained on it.

```

##
## antispam plugin config
##
plugin {
    antispam_backend = dspam
    antispam_dspam_binary = /usr/bin/dspam
    antispam_signature = X-DSPAM-Signature
    antispam_signature_missing = move
    antispam_dspam_result_header = X-DSPAM-Result
    antispam_dspam_result_blacklist =
    Virus;Blocklisted;Blacklisted

```

apache

```
    antispam_trash = trash;Trash;Deleted Items;Deleted
Messages
    antispam_trash_pattern_ignorecase = TRASH
    antispam_spam = Spam;Junk
    antispam_spam_pattern_ignorecase = SPAM;JUNK

    antispam_dspam_args = --client;--user;%Lu;--source=error
    antispam_dspam_spam = --class=spam
    antispam_dspam_notspam = --class=innocent
}
```

DKIM

`/etc/openskim.conf`

apache

```
Syslog          yes
UMask           002
# postfix user
UserID          104

Domain          your.domain
KeyFile         /etc/ssl/your.domain.dkim.private
Selector        mail

Mode sv
SubDomains      yes
AutoRestart     yes
Background      yes
Canonicalization relaxed/relaxed
DNSTimeout      5
SignatureAlgorithm rsa-sha256
#UseASPDiscard  no
##Version       rfc4871
X-Header        yes

InternalHosts   /etc/internalhosts

OversignHeaders      From
```

Links

1. <http://fuerstnet.de/en/roundcube-dovecot-imap-and-case-sensitive-user-names>

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