

LAPORAN RESMI

POST TEST 2

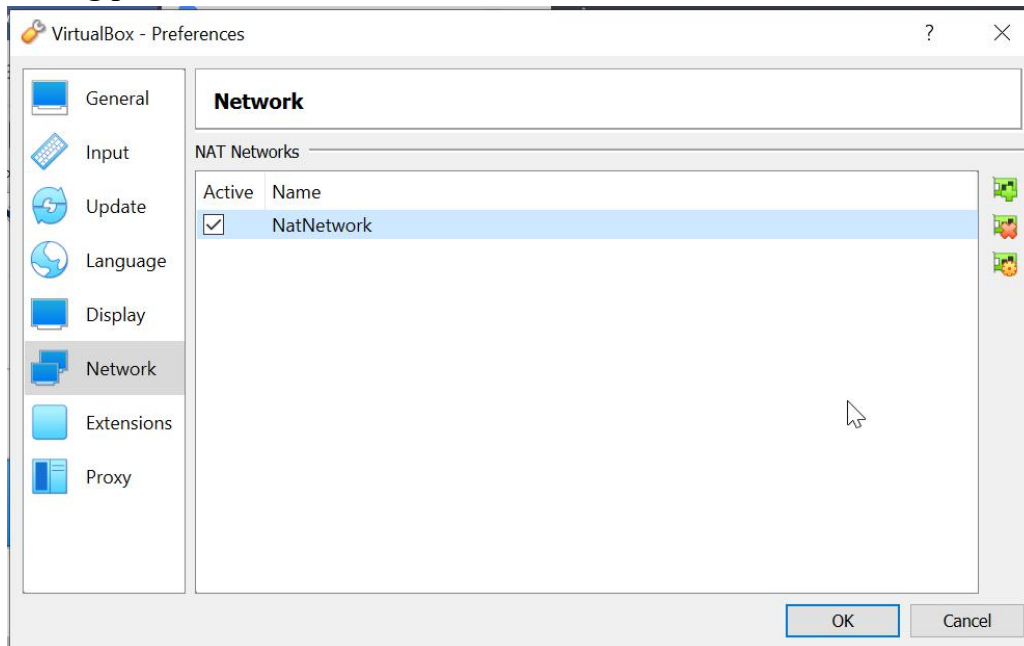
WORKSHOP ADMINISTRASI & MANAJEMEN JARINGAN



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NRP : 2110191001

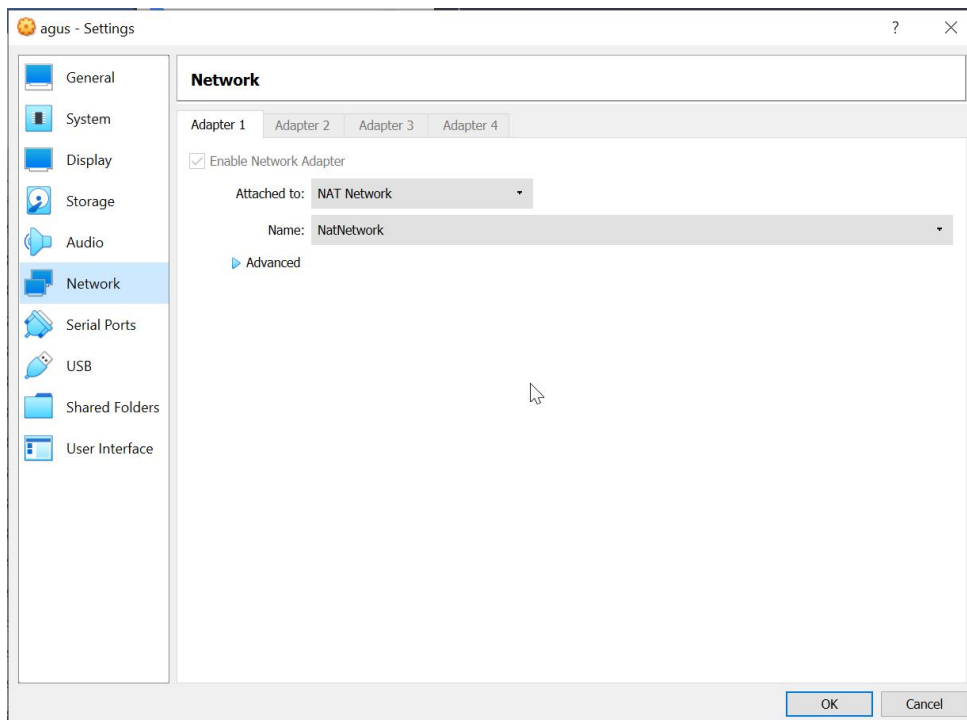
POST TEST 2 – MAIL SERVER & MAIL LIST

Pertama siapkan 2 linux lalu ubah konfigurasi Network ubuntu pada Virtualbox dengan cara klik Setting pada list linux > File> Preferences > Network->addnew Nat Network



Kedua setting network pada masing-masing OS.

Select OS->Setting->Network->Attached To NAT Network->OK



Setting Squirrelmail Server 1 (agus)

Config IP

```
root@agus-VirtualBox:/home/agus# ifconfig
enp0s3  Link encap:Ethernet  HWaddr 08:00:27:43:d6:0c
        inet addr:10.0.2.4  Bcast:10.0.2.255  Mask:255.255.255.0
        inet6 addr: fe80::1a8a:3b37:7740:3af/64 Scope:Link
        UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
        RX packets:478 errors:0 dropped:0 overruns:0 frame:0
        TX packets:2119 errors:0 dropped:0 overruns:0 carrier:0
        collisions:0 txqueuelen:1000
        RX bytes:96109 (96.1 KB)  TX bytes:211211 (211.2 KB)

lo      Link encap:Local Loopback
        inet addr:127.0.0.1  Mask:255.0.0.0
        inet6 addr: ::1/128 Scope:Host
        UP LOOPBACK RUNNING  MTU:65536  Metric:1
        RX packets:1735 errors:0 dropped:0 overruns:0 frame:0
        TX packets:1735 errors:0 dropped:0 overruns:0 carrier:0
        collisions:0 txqueuelen:1000
        RX bytes:178577 (178.5 KB)  TX bytes:178577 (178.5 KB)

root@agus-VirtualBox:/home/agus#
```

1. Install DNS Server dengan command apt-get install bind9 dnsutils

```
root@agus-VirtualBox:/home/agus# apt-get install bind9
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  bind9-host bind9utils dnsutils libbind9-140 libdns162 libirs141 libisc160
  libisccc140 libiscfg140 liblwres141
Suggested packages:
  bind9-doc rblcheck
The following NEW packages will be installed:
  bind9 bind9utils libirs141
The following packages will be upgraded:
  bind9-host dnsutils libbind9-140 libdns162 libisc160 libisccc140
  libiscfg140 liblwres141
8 upgraded, 3 newly installed, 0 to remove and 178 not upgraded.
Need to get 1.920 kB of archives.
After this operation, 2.936 kB of additional disk space will be used.
Do you want to continue? [Y/n] Y
Get:1 http://id.archive.ubuntu.com/ubuntu xenial-updates/main amd64 bind9-host
md64 1:9.10.3.dfsg.P4-8ubuntu1.19 [38,3 kB]
Get:2 http://id.archive.ubuntu.com/ubuntu xenial-updates/main amd64 dnsutils a
```

2. Edit /etc/bind/named.conf.local

```
named.conf.local
/etc/bind

//
// Do any local configuration here
//

// Consider adding the 1918 zones here, if they are not used in your
// organization
//include "/etc/bind/zones.rfc1918";

zone "agus.com" {
    type master;
    file "/var/cache/bind/db.agus";
};

zone "2.0.10.in-addr.arpa" {
    type master;
    file "/var/cache/bind/db.rev";
};

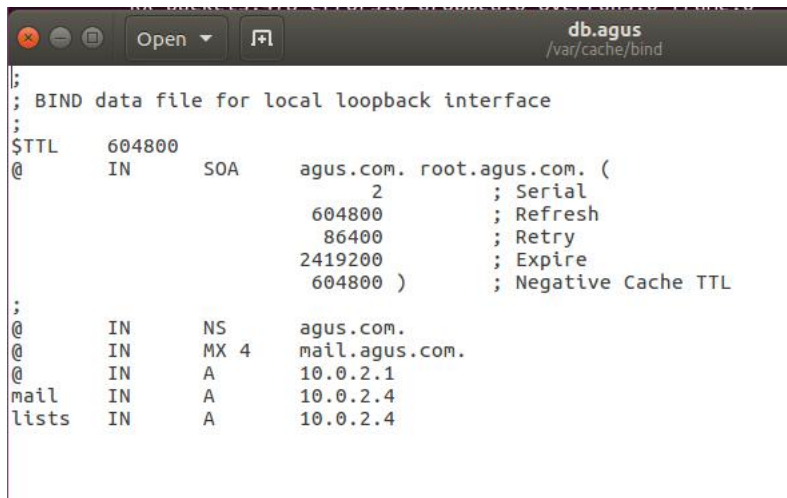
zone "kertha.com" {
    type master;
    file "/var/cache/bind/db.kertha";
};
```

3. Buat file db.agus, db.kertha dan db.rev sesuai direktori pada konfigurasi dibawah

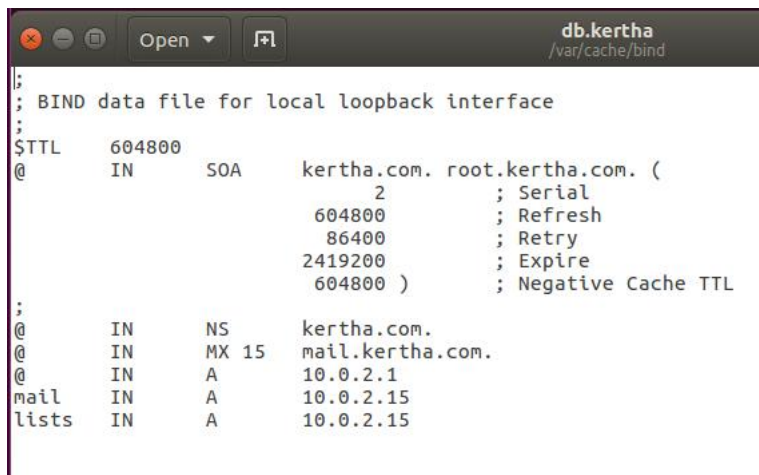
```
root@agus-VirtualBox:/home/agus# cp /etc/bind/db.local /var/cache/bind/db.agus
root@agus-VirtualBox:/home/agus# cp /etc/bind/db.local /var/cache/bind/db.kertha
root@agus-VirtualBox:/home/agus# gedit /etc/bind/named.conf.local

** (gedit:3723): WARNING **: Set document metadata failed: Setting attribute met
adata::gedit-position not supported
root@agus-VirtualBox:/home/agus# cp /etc/bind/db.127 /var/cache/bind/db.rev
root@agus-VirtualBox:/home/agus# gedit /var/cache/bind/db.agus
```

```
root@kertha-VirtualBox:/home/kertha# cp /etc/bind/db.local /var/cache/bind/db.ke
rtha
root@kertha-VirtualBox:/home/kertha# cp /etc/bind/db.local /var/cache/bind/db.ag
us
root@kertha-VirtualBox:/home/kertha# cp /etc/bind/db.127 /var/cache/bind/db.rev
root@kertha-VirtualBox:/home/kertha#
root@kertha-VirtualBox:/home/kertha#
```



```
;
; BIND data file for local loopback interface
;
$TTL      604800
@         IN      SOA      agus.com. root.agus.com. (
                        2          ; Serial
                        604800     ; Refresh
                        86400      ; Retry
                        2419200    ; Expire
                        604800 )   ; Negative Cache TTL
;
@         IN      NS       agus.com.
@         IN      MX 4     mail.agus.com.
@         IN      A        10.0.2.1
mail      IN      A        10.0.2.4
lists     IN      A        10.0.2.4
```



```
;
; BIND data file for local loopback interface
;
$TTL      604800
@         IN      SOA      kertha.com. root.kertha.com. (
                        2          ; Serial
                        604800     ; Refresh
                        86400      ; Retry
                        2419200    ; Expire
                        604800 )   ; Negative Cache TTL
;
@         IN      NS       kertha.com.
@         IN      MX 15    mail.kertha.com.
@         IN      A        10.0.2.1
mail      IN      A        10.0.2.15
lists     IN      A        10.0.2.15
```

```
UP LOOPBACK RUNNING MTU:65536 Metric:0
db.rev
/var/cache/bind

; BIND reverse data file for local loopback interface
;
$TTL 604800
@ IN SOA localhost. root.localhost. (
    1          ; Serial
    604800     ; Refresh
    86400      ; Retry
    2419200    ; Expire
    604800 )   ; Negative Cache TTL
;
@ IN NS localhost.
4 IN PTR mail.agus.com.
15 IN PTR mail.kertha.com.
```

4. Edit /etc/resolv.conf dan tambahkan ip anda

```
root@agus-VirtualBox: /home/agus
GNU nano 2.5.3 File: /etc/resolv.conf

# Dynamic resolv.conf(5) file for glibc resolver(3) generated by resolvconf(8)
# DO NOT EDIT THIS FILE BY HAND -- YOUR CHANGES WILL BE OVERWRITTEN
#nameserver 127.0.1.1
nameserver 10.0.2.4
```

5. Restart bind9 dengan command /etc/init.d/bind9 restart

```
root@agus-VirtualBox:/home/agus# /etc/init.d/bind9 restart
[ ok ] Restarting bind9 (via systemctl): bind9.service.
```

6. Untuk melakukan uji coba, ketik nslookup dan masukan semua dns name dan ip yang kita gunakan untuk konfigurasi

```
root@agus-VirtualBox:/home/agus# nslookup 10.0.2.15
Server: 10.0.2.15
Address: 10.0.2.15#53

15.2.0.10.in-addr.arpa name = mail.kertha.com.
15.2.0.10.in-addr.arpa name = mail.agus.com.
```

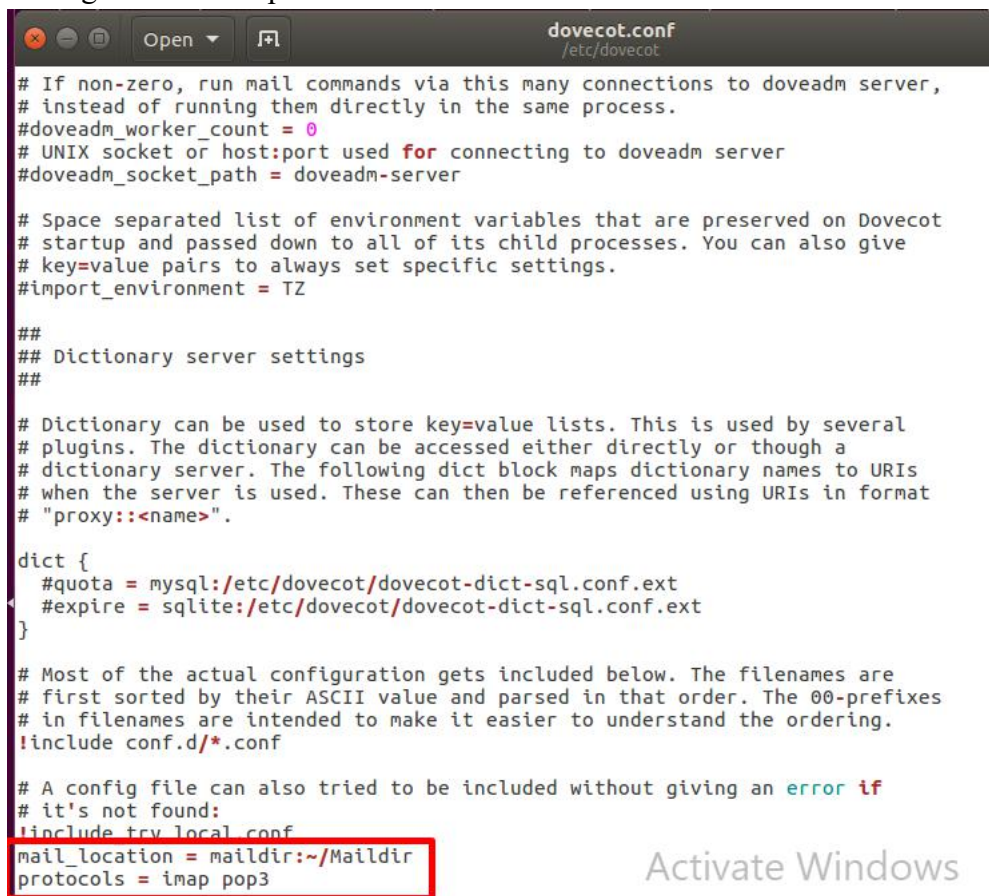
7. Selanjutnya install postfix, apache, imap, pop, squirrelmail dengan command apt-get install apache2 postfix courier-imap courier-pop squirrelmail

```
root@agus-VirtualBox:/home/agus# apt-get install postfix apache2 courier-imap co
urier-pop squirrelmail
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  apache2-bin apache2-data apache2-utils courier-authdaemon courier-authlib
  courier-authlib-userdb courier-base expect gamin libapache2-mod-php
  libapache2-mod-php7.0 libapr1 libaprutil1 libaprutil1-dbd-sqlite3
  libaprutil1-ldap libgamin0 liblua5.1-0 php-common php7.0-cli php7.0-common
  php7.0-json php7.0-opcache php7.0-readline squirrelmail-locales
  squirrelmail-viewashtml tcl-expect
Suggested packages:
  apache2-doc apache2-suexec-pristine | apache2-suexec-custom courier-doc
  imap-client courier-imap-ssl courier-pop-ssl php-pear procmail postfix-mysql
  postfix-pgsql postfix-ldap postfix-pcre sasl2-bin dovecot-common postfix-cdb
  postfix-doc squirrelmail-decode php-recode imapproxy php-ldap
The following NEW packages will be installed:
  apache2 apache2-bin apache2-data apache2-utils courier-authdaemon
  courier-authlib courier-authlib-userdb courier-base courier-imap courier-pop
```

8. Install dovecot-common dovecot-imapd dovecot-pop3d

```
root@agus-VirtualBox:/home/agus# apt-get install dovecot-common dovecot-imapd dovecot-pop3d
Reading package lists... Done
Building dependency tree
Reading state information... Done
Note, selecting 'dovecot-core' instead of 'dovecot-common'
The following packages were automatically installed and are no longer required:
  courier-authdaemon courier-authlib courier-authlib-userdb courier-base
  expect gamin libgamin0 tcl-expect
Use 'sudo apt autoremove' to remove them.
The following additional packages will be installed:
  ntpdate
Suggested packages:
  ntp dovecot-gssapi dovecot-sieve dovecot-pgsql dovecot-mysql dovecot-sqlite
  dovecot-ldap dovecot-lmtpd dovecot-managesieved dovecot-solr
The following packages will be REMOVED:
  courier-imap courier-pop
The following NEW packages will be installed:
  dovecot-core dovecot-imapd dovecot-pop3d ntpdate
0 upgraded, 4 newly installed, 2 to remove and 178 not upgraded.
Need to get 2.645 kB of archives.
After this operation, 7.679 kB of additional disk space will be used.
```

9. Konfigurasi maildir pada /etc/dovecot/dovecot.conf



```
dovecot.conf
/etc/dovecot

# If non-zero, run mail commands via this many connections to doveadm server,
# instead of running them directly in the same process.
#doveadm_worker_count = 0
# UNIX socket or host:port used for connecting to doveadm server
#doveadm_socket_path = doveadm-server

# Space separated list of environment variables that are preserved on Dovecot
# startup and passed down to all of its child processes. You can also give
# key=value pairs to always set specific settings.
#import_environment = TZ

##
## Dictionary server settings
##

# Dictionary can be used to store key=value lists. This is used by several
# plugins. The dictionary can be accessed either directly or through a
# dictionary server. The following dict block maps dictionary names to URIs
# when the server is used. These can then be referenced using URIs in format
# "proxy::<name>".

dict {
  #quota = mysql:/etc/dovecot/dovecot-dict-sql.conf.ext
  #expire = sqlite:/etc/dovecot/dovecot-dict-sql.conf.ext
}

# Most of the actual configuration gets included below. The filenames are
# first sorted by their ASCII value and parsed in that order. The 00-prefixes
# in filenames are intended to make it easier to understand the ordering.
!include conf.d/*.conf

# A config file can also be tried to be included without giving an error if
# it's not found:
!include_try local.conf

mail_location = maildir:~/Maildir
protocols = imap pop3
```

10. Jika sudah buat Maildir pada /etc/skel dengan command maildirmake /etc/skel/Maildir

```
root@agus-VirtualBox:/home/agus#
root@agus-VirtualBox:/home/agus# maildirmake /etc/skel/Maildir
root@agus-VirtualBox:/home/agus#
```

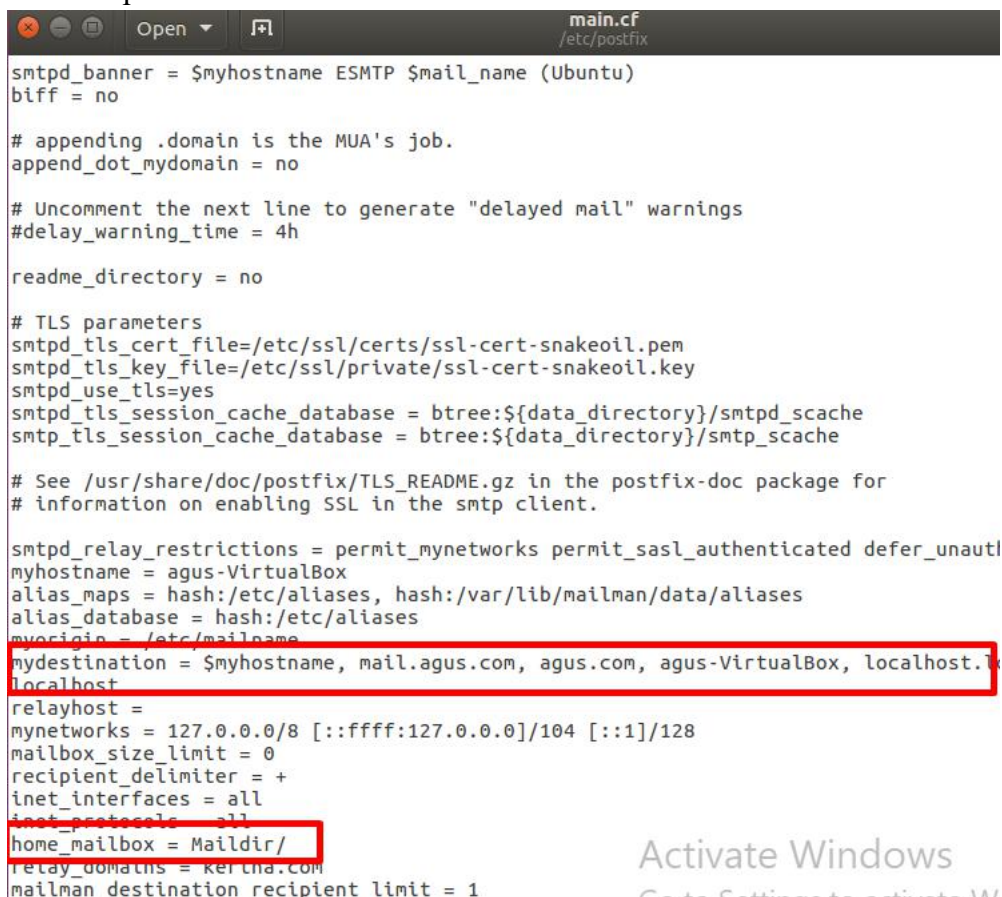
11. Setting share direktori apache dengan squirrelmail

```
root@agus-VirtualBox:/home/agus# cd /var/www
root@agus-VirtualBox:/var/www# ln -s /usr/share/squirrelmail/* .
root@agus-VirtualBox:/var/www#
```

12. Tambahkan 4 user agus, tono, ana, ani dengan command adduser namauser

```
root@agus-VirtualBox:/var/www# adduser tono
Adding user `tono' ...
Adding new group `tono' (1001) ...
Adding new user `tono' (1001) with group `tono' ...
Creating home directory `/home/tono' ...
Copying files from `/etc/skel' ...
Enter new UNIX password:
Retype new UNIX password:
Sorry, passwords do not match
passwd: Authentication token manipulation error
passwd: password unchanged
Try again? [y/N] y
Enter new UNIX password:
Retype new UNIX password:
passwd: password updated successfully
Changing the user information for tono
Enter the new value, or press ENTER for the default
  Full Name []: tono
  Room Number []:
  Work Phone []:
  Home Phone []:
  Other []:
Is the information correct? [Y/n] y
```

13. Edit /etc/postfix/main.cf sesuai dibawah ini



```
main.cf
/etc/postfix

smtpd_banner = $myhostname ESMTP $mail_name (Ubuntu)
biff = no

# appending .domain is the MUA's job.
append_dot_mydomain = no

# Uncomment the next line to generate "delayed mail" warnings
#delay_warning_time = 4h

readme_directory = no

# TLS parameters
smtpd_tls_cert_file=/etc/ssl/certs/ssl-cert-snakeoil.pem
smtpd_tls_key_file=/etc/ssl/private/ssl-cert-snakeoil.key
smtpd_use_tls=yes
smtpd_tls_session_cache_database = btree:${data_directory}/smtpd_scache
smtp_tls_session_cache_database = btree:${data_directory}/smtp_scache

# See /usr/share/doc/postfix/TLS_README.gz in the postfix-doc package for
# information on enabling SSL in the smtp client.

smtpd_relay_restrictions = permit_mynetworks permit_sasl_authenticated defer_unautl
myhostname = agus-VirtualBox
alias_maps = hash:/etc/aliases, hash:/var/lib/mailman/data/aliases
alias_database = hash:/etc/aliases
myorigin = /etc/mailname
mydestination = $myhostname, mail.agus.com, agus.com, agus-VirtualBox, localhost.localdomain
relayhost =
mynetworks = 127.0.0.0/8 [::ffff:127.0.0.0]/104 [::1]/128
mailbox_size_limit = 0
recipient_delimiter = +
inet_interfaces = all
inet_protocols = all
home_mailbox = Maildir/
relay_domains = kerfina.com
mailman_destination_recipient_limit = 1
```

14. Restart postfix dengan command /etc/init.d/postfix restart

```
root@agus-VirtualBox:/var/www# /etc/init.d/postfix restart
[ ok ] Restarting postfix (via systemctl): postfix.service.
root@agus-VirtualBox:/var/www#
```

15. Edit /etc/apache2/sites-enabled/000-default.conf untuk membuat virtualhost untuk domain mail lalu tambahkan baris code dibawah ini

```
root@agus-VirtualBox: /home/agus# nedit /var/cache/bind/db.agus
000-default.conf
/etc/apache2/sites-available

<VirtualHost *:80>
# The ServerName directive sets the request scheme, hostname and port that
# the server uses to identify itself. This is used when creating
# redirection URLs. In the context of virtual hosts, the ServerName
# specifies what hostname must appear in the request's Host: header to
# match this virtual host. For the default virtual host (this file) this
# value is not decisive as it is used as a last resort host regardless.
# However, you must set it for any further virtual host explicitly.
#ServerName www.example.com

ServerAdmin webmaster@localhost
DocumentRoot /var/www/html

# Available loglevels: trace8, ..., trace1, debug, info, notice, warn,
# error, crit, alert, emerg.
# It is also possible to configure the loglevel for particular
# modules, e.g.
#LogLevel info ssl:warn

ErrorLog ${APACHE_LOG_DIR}/error.log
CustomLog ${APACHE_LOG_DIR}/access.log combined

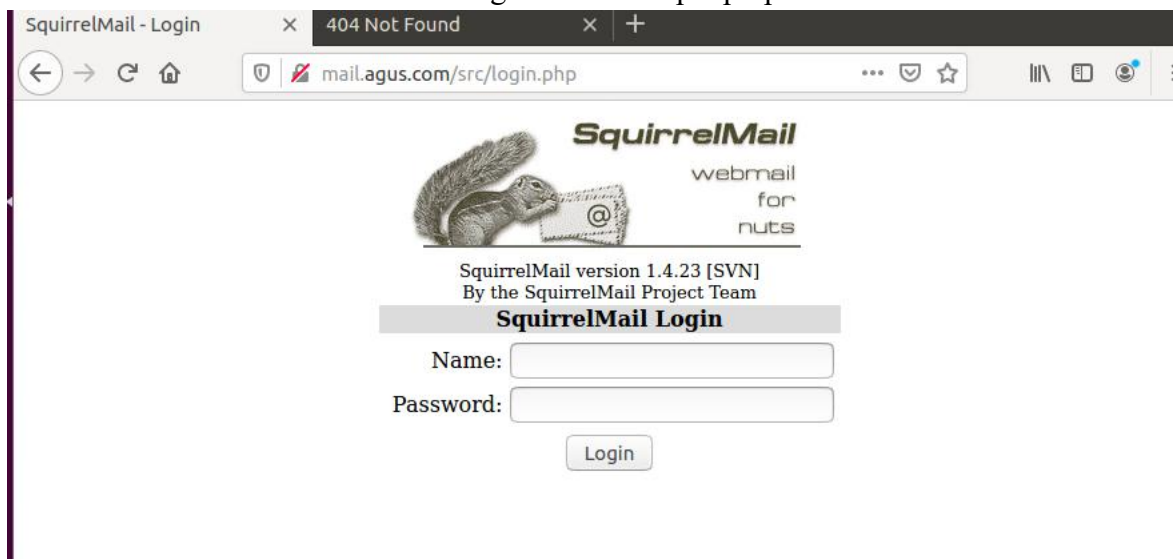
# For most configuration files from conf-available/, which are
# enabled or disabled at a global level, it is possible to
# include a line for only one particular virtual host. For example the
# following line enables the CGI configuration for this host only
# after it has been globally disabled with "a2disconf".
#Include conf-available/serve-cgi-bin.conf
</VirtualHost>

<VirtualHost 10.0.2.4:80>
ServerAdmin agus@agus.com
ServerName mail.agus.com
DocumentRoot /usr/share/squirrelmail
</VirtualHost>
```

16. Restart apache dengan command /etc/init.d/apache2 restart

```
root@agus-VirtualBox: /var/www# /etc/init.d/apache2 restart
[ ok ] Restarting apache2 (via systemctl): apache2.service.
root@agus-VirtualBox: /var/www# /etc/init.d/dovecot restart
[ ok ] Restarting dovecot (via systemctl): dovecot.service.
root@agus-VirtualBox: /var/www# /etc/init.d/apache2 restart
[ ok ] Restarting apache2 (via systemctl): apache2.service^[A
root@agus-VirtualBox: /var/www# /etc/init.d/postfix restart
[ ok ] Restarting postfix (via systemctl): postfix.service.
root@agus-VirtualBox: /var/www# /etc/init.d/bind9 restart
[ ok ] Restarting bind9 (via systemctl): bind9.service.
```

17. Lalu buka browser dan ketikan mail.agus.com atau ip laptop anda



Setting Squirrelmail Server 2 (kertha)

```
kertha@kertha-VirtualBox:~$ sudo su
root@kertha-VirtualBox:/home/kertha# ifconfig
enp0s3    Link encap:Ethernet  HWaddr 08:00:27:85:7a:53
          inet addr:10.0.2.15  Bcast:10.0.2.255  Mask:255.255.255.0
          inet6 addr: fe80::3256:551d:a4eb:cca2/64  Scope:Link
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:6 errors:0 dropped:0 overruns:0 frame:0
          TX packets:58 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:1175 (1.1 KB)  TX bytes:6901 (6.9 KB)

lo        Link encap:Local Loopback
          inet addr:127.0.0.1  Mask:255.0.0.0
          inet6 addr: ::1/128  Scope:Host
          UP LOOPBACK RUNNING  MTU:65536  Metric:1
          RX packets:20 errors:0 dropped:0 overruns:0 frame:0
          TX packets:20 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:1271 (1.2 KB)  TX bytes:1271 (1.2 KB)

root@kertha-VirtualBox:/home/kertha#
```

1. Install DNS Server dengan command apt-get install bind9 dnsutils

```
root@kertha-VirtualBox:/home/kertha# apt-get install bind9
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  bind9-host bind9utils dnsutils libbind9-140 libdns162 libirs141 libisc160
  libisccc140 libisccfg140 liblwres141
Suggested packages:
  bind9-doc rblcheck
The following NEW packages will be installed:
  bind9 bind9utils libirs141
The following packages will be upgraded:
  bind9-host dnsutils libbind9-140 libdns162 libisc160 libisccc140
  libisccfg140 liblwres141
8 upgraded, 3 newly installed, 0 to remove and 178 not upgraded.
Need to get 1.920 kB of archives.
After this operation, 2.936 kB of additional disk space will be used.
Do you want to continue? [Y/n]
```

2. Edit /etc/bind/named.conf.local

```
named.conf.local
/etc/bind

//
// Do any local configuration here
//

// Consider adding the 1918 zones here, if they are not used in your
// organization
//include "/etc/bind/zones.rfc1918";

zone "kertha.com" {
    type master;
    file "/var/cache/bind/db.kertha";
};

zone "2.0.10.in-addr.arpa" {
    type master;
    file "/var/cache/bind/db.rev";
};

zone "agus.com" {
    type master;
    file "/var/cache/bind/db.agus";
};
```

3. Buat file db.kertha, db.agus dan db.rev sesuai direktori pada konfigurasi diatas

```
root@agusserver2-VirtualBox: /etc/bind
root@agusserver2-VirtualBox:/home/agus-server-2# cd /etc/bind
root@agusserver2-VirtualBox:/etc/bind# cd db.local /var/cache/bind/db.pens
bash: cd: db.local: Not a directory
root@agusserver2-VirtualBox:/etc/bind# cp db.local /var/cache/bind/db.pens
root@agusserver2-VirtualBox:/etc/bind# cp db.local /var/cache/bind/db.agus
root@agusserver2-VirtualBox:/etc/bind# cp db.127 /var/cache/bind/db.rev
root@agusserver2-VirtualBox:/etc/bind#
```

```
root@kertha-VirtualBox: /home/kertha
GNU nano 2.5.3 File: /var/cache/bind/db.kertha

;
; BIND data file for local loopback interface
;
$TTL      604800
@         IN      SOA      kertha.com. root.kertha. (
                        2      ; Serial
                        604800 ; Refresh
                        86400  ; Retry
                        2419200 ; Expire
                        604800 ) ; Negative Cache TTL
;
@         IN      NS       kertha.com.
@         IN      MX  15    mail.kertha.com.
@         IN      A        10.0.2.1
mail      IN      A        10.0.2.15
lists     IN      A        10.0.2.15
```

```
root@kertha-VirtualBox: /home/kertha
GNU nano 2.5.3 File: /var/cache/bind/db.agus

;
; BIND data file for local loopback interface
;
$TTL      604800
@         IN      SOA      agus.com. root.agus.com. (
                        2      ; Serial
                        604800 ; Refresh
                        86400  ; Retry
                        2419200 ; Expire
                        604800 ) ; Negative Cache TTL
;
@         IN      NS       agus.com.
@         IN      MX  4     mail.agus.com.
@         IN      A        10.0.2.1
mail      IN      A        10.0.2.4
lists     IN      A        10.0.2.4
```

```
root@kertha-VirtualBox: /home/kertha
GNU nano 2.5.3 File: /var/cache/bind/db.rev

;
; BIND reverse data file for local loopback interface
;
$TTL      604800
@         IN      SOA      localhost. root.localhost. (
                        1      ; Serial
                        604800 ; Refresh
                        86400  ; Retry
                        2419200 ; Expire
                        604800 ) ; Negative Cache TTL
;
@         IN      NS       localhost.
15        IN      PTR      mail.kertha.com.
4         IN      PTR      mail.agus.com.
```

4. Edit /etc/resolv.conf dan tambahkan ip anda

```
root@kertha-VirtualBox: /home/kertha
GNU nano 2.5.3      File: /etc/resolv.conf

# Dynamic resolv.conf(5) file for glibc resolver(3) generated by resolvconf(8)
#     DO NOT EDIT THIS FILE BY HAND -- YOUR CHANGES WILL BE OVERWRITTEN
#nameserver 127.0.1.1

nameserver 10.0.2.15
```

5. Restart bind9 dengan command /etc/init.d/bind9 restart

```
root@kertha-VirtualBox:/home/kertha# /etc/init.d/bind9 restart
[ ok ] Restarting bind9 (via systemctl): bind9.service.
root@kertha-VirtualBox:/home/kertha#
```

6. Untuk melakukan uji coba, ketik nslookup dan masukan semua dns name dan ip yang kita gunakan untuk konfigurasi

```
root@kertha-VirtualBox:/home/kertha# nslookup 10.0.2.15
Server:      10.0.2.15
Address:     10.0.2.15#53

15.2.0.10.in-addr.arpa  name = mail.kertha.com.
15.2.0.10.in-addr.arpa  name = mail.agus.com.

root@kertha-VirtualBox:/home/kertha#
```

7. Selanjutnya install postfix, apache, imap, pop, squirrelmail dengan command apt-get install apache2 postfix courier-imap courier-pop squirrelmail

```
root@kertha-VirtualBox:/home/kertha# apt-get install postfix apache2 courier-imap
p courier-pop squirrelmail
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  apache2-bin apache2-data apache2-utils courier-authdaemon courier-authlib
  courier-authlib-userdb courier-base expect gamin libapache2-mod-php
  libapache2-mod-php7.0 libapr1 libaprutil1 libaprutil1-dbd-sqlite3
  libaprutil1-ldap libgamin0 liblua5.1-0 php-common php7.0-cli php7.0-common
  php7.0-json php7.0-opcache php7.0-readline squirrelmail-locales
  squirrelmail-viewashtml tcl-expect
Suggested packages:
  apache2-doc apache2-suexec-pristine | apache2-suexec-custom courier-doc
  imap-client courier-imap-ssl courier-pop-ssl php-pear procmail postfix-mysql
  postfix-pgsql postfix-ldap postfix-pcre sasl2-bin dovecot-common postfix-cdb
  postfix-doc squirrelmail-decode php-recode imapproxy php-ldap
The following NEW packages will be installed:
  apache2 apache2-bin apache2-data apache2-utils courier-authdaemon
  courier-authlib courier-authlib-userdb courier-base courier-imap courier-pop
  expect gamin libapache2-mod-php libapache2-mod-php7.0 libapr1 libaprutil1
  libaprutil1-dbd-sqlite3 libaprutil1-ldap libgamin0 liblua5.1-0 php-common
  php7.0-cli php7.0-common php7.0-json php7.0-opcache php7.0-readline postfix
  squirrelmail squirrelmail-locales squirrelmail-viewashtml tcl-expect
0 upgraded, 31 newly installed, 0 to remove and 178 not upgraded.
Need to get 10,6 MB of archives.
After this operation, 41,2 MB of additional disk space will be used.
Do you want to continue? [Y/n]
```

8. Install dovecot-common dovecot-imapd dovecot-pop3d

```
root@kertha-VirtualBox:/home/kertha# apt-get install dovecot-common dovecot-imapd dovecot-pop3d
Reading package lists... Done
Building dependency tree
Reading state information... Done
Note, selecting 'dovecot-core' instead of 'dovecot-common'
The following packages were automatically installed and are no longer required:
  courier-authdaemon courier-authlib courier-authlib-userdb courier-base
  expect gamin libgamin0 tcl-expect
Use 'sudo apt autoremove' to remove them.
The following additional packages will be installed:
  ntpdate
Suggested packages:
  ntp dovecot-gssapi dovecot-sieve dovecot-pgsql dovecot-mysql dovecot-sqlite
  dovecot-ldap dovecot-lmtpd dovecot-managesieved dovecot-solr
The following packages will be REMOVED:
  courier-imap courier-pop
The following NEW packages will be installed:
  dovecot-core dovecot-imapd dovecot-pop3d ntpdate
0 upgraded, 4 newly installed, 2 to remove and 178 not upgraded.
Need to get 2.645 kB of archives.
After this operation, 7.679 kB of additional disk space will be used.
Do you want to continue? [Y/n]
```

9. Konfigurasi maildir pada /etc/dovecot/dovecot.conf

```
dovecot.conf
/etc/dovecot

# If non-zero, run mail commands via this many connections to doveadm server,
# instead of running them directly in the same process.
#doveadm_worker_count = 0
# UNIX socket or host:port used for connecting to doveadm server
#doveadm_socket_path = doveadm-server

# Space separated list of environment variables that are preserved on Dovecot
# startup and passed down to all of its child processes. You can also give
# key=value pairs to always set specific settings.
#import_environment = TZ

##
## Dictionary server settings
##

# Dictionary can be used to store key=value lists. This is used by several
# plugins. The dictionary can be accessed either directly or through a
# dictionary server. The following dict block maps dictionary names to URIs
# when the server is used. These can then be referenced using URIs in format
# "proxy::<name>".

dict {
  #quota = mysql:/etc/dovecot/dovecot-dict-sql.conf.ext
  #expire = sqlite:/etc/dovecot/dovecot-dict-sql.conf.ext
}

# Most of the actual configuration gets included below. The filenames are
# first sorted by their ASCII value and parsed in that order. The 00-prefixes
# in filenames are intended to make it easier to understand the ordering.
!include conf.d/*.conf

# A config file can also tried to be included without giving an error if
# it's not found:
!include_try local.conf
mail_location = maildir:~/Maildir
protocols = imap pop3
```

10. Jika sudah buat Maildir pada /etc/skel dengan command maildirmake /etc/skel/Maildir

```
root@kertha-VirtualBox:/home/kertha#
root@kertha-VirtualBox:/home/kertha# maildirmake /etc/skel/Maildir
root@kertha-VirtualBox:/home/kertha#
root@kertha-VirtualBox:/home/kertha#
```

11. Setting share direktori apache dengan squirrelmail

```
root@kertha-VirtualBox:/home/kertha# cd /var/www
root@kertha-VirtualBox:/var/www# ln -s /usr/share/squirrelmail/* .
root@kertha-VirtualBox:/var/www#
root@kertha-VirtualBox:/var/www#
```

12. Tambahkan 4 user toni, anton, tina, tini dengan command adduser namauser

```
root@kertha-VirtualBox:/var/www# adduser anton
Adding user `anton' ...
Adding new group `anton' (1001) ...
Adding new user `anton' (1001) with group `anton' ...
Creating home directory `/home/anton' ...
Copying files from `/etc/skel' ...
Enter new UNIX password:
Retype new UNIX password:
passwd: password updated successfully
Changing the user information for anton
Enter the new value, or press ENTER for the default
  Full Name []: anton
  Room Number []:
  Work Phone []:
  Home Phone []:
  Other []:
Is the information correct? [Y/n] Y
root@kertha-VirtualBox:/var/www#
```

13. Edit /etc/postfix/main.cf sesuai dibawah ini

```
main.cf
/etc/postfix

#myorigin = /etc/mailname

smtpd_banner = $myhostname ESMTP $mail_name (Ubuntu)
biff = no

# appending .domain is the MUA's job.
append_dot_mydomain = no

# Uncomment the next line to generate "delayed mail" warnings
#delay_warning_time = 4h

readme_directory = no

# TLS parameters
smtpd_tls_cert_file=/etc/ssl/certs/ssl-cert-snakeoil.pem
smtpd_tls_key_file=/etc/ssl/private/ssl-cert-snakeoil.key
smtpd_use_tls=yes
smtpd_tls_session_cache_database = btree:${data_directory}/smtpd_scache
smtp_tls_session_cache_database = btree:${data_directory}/smtp_scache

# See /usr/share/doc/postfix/TLS_README.gz in the postfix-doc package for
# information on enabling SSL in the smtp client.

smtpd_relay_restrictions = permit_mynetworks permit_sasl_authenticated defer_unautl
myhostname = kertha-VirtualBox
alias_maps = hash:/etc/aliases
alias_database = hash:/etc/aliases
myorigin = /etc/mailname
mydestination = $myhostname, mail.kertha.com, kertha.com, kertha-VirtualBox,
localhost.localdomain, localhost
relayhost =
mynetworks = 127.0.0.0/8 [::ffff:127.0.0.0]/104 [::1]/128
mailbox_size_limit = 0
recipient_delimiter = +
inet_interfaces = all
inet_protocols = all
home_mailbox = Maildir/
```

14. Restart postfix dengan command /etc/init.d/postfix restart

```
root@kertha-VirtualBox:/var/www# /etc/init.d/postfix restart
[ ok ] Restarting postfix (via systemctl): postfix.service.
root@kertha-VirtualBox:/var/www#
```

15. Edit /etc/apache2/sites-enabled/000-default.conf untuk membuat virtualhost untuk domain mail lalu tambahkan baris code dibawah ini

```
000-default.conf
/etc/apache2/sites-available

<VirtualHost *:80>
# The ServerName directive sets the request scheme, hostname and port that
# the server uses to identify itself. This is used when creating
# redirection URLs. In the context of virtual hosts, the ServerName
# specifies what hostname must appear in the request's Host: header to
# match this virtual host. For the default virtual host (this file) this
# value is not decisive as it is used as a last resort host regardless.
# However, you must set it for any further virtual host explicitly.
#ServerName www.example.com

ServerAdmin webmaster@localhost
DocumentRoot /var/www/html

# Available loglevels: trace8, ..., trace1, debug, info, notice, warn,
# error, crit, alert, emerg.
# It is also possible to configure the loglevel for particular
# modules, e.g.
#LogLevel info ssl:warn

ErrorLog ${APACHE_LOG_DIR}/error.log
CustomLog ${APACHE_LOG_DIR}/access.log combined

# For most configuration files from conf-available/, which are
# enabled or disabled at a global level, it is possible to
# include a line for only one particular virtual host. For example the
# following line enables the CGI configuration for this host only
# after it has been globally disabled with "a2disconf".
#Include conf-available/serve-cgi-bin.conf
</VirtualHost>

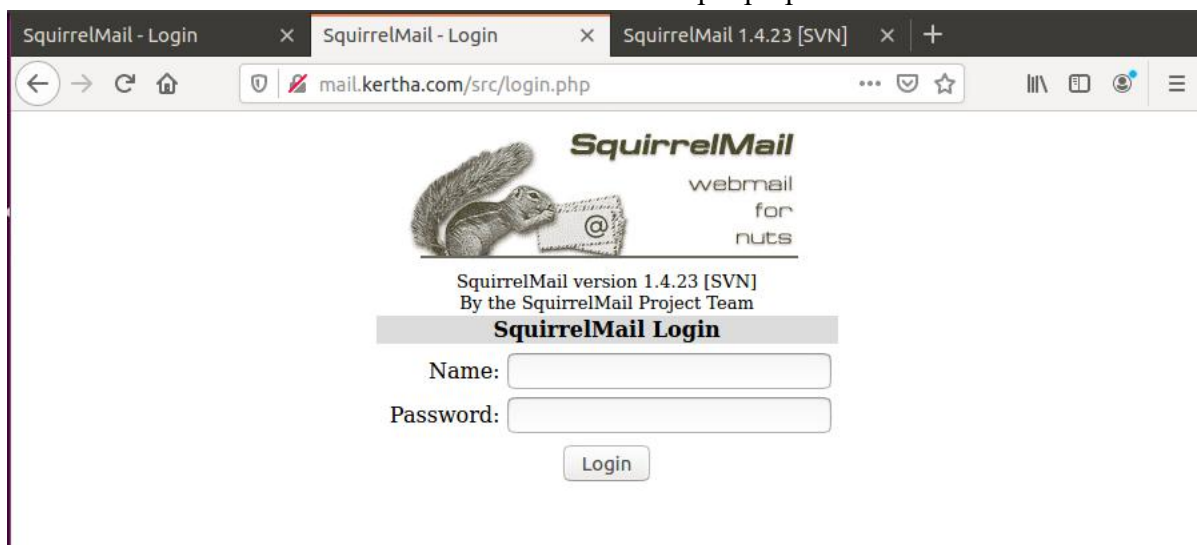
<VirtualHost 10.0.2.15:80>
ServerAdmin kertha@kertha.com
ServerName mail.kertha.com
DocumentRoot /usr/share/squirrelmail
</VirtualHost>

# vim: syntax=apache ts=4 sw=4 sts=4 sr noet
```

16. Restart apache dengan command /etc/init.d/apache2 restart

```
root@kertha-VirtualBox:/var/www# /etc/init.d/postfix restart
[ ok ] Restarting postfix (via systemctl): postfix.service.
root@kertha-VirtualBox:/var/www# /etc/init.d/apache2 restart
[ ok ] Restarting apache2 (via systemctl): apache2.service.
root@kertha-VirtualBox:/var/www# /etc/init.d/dovecot restart
[ ok ] Restarting dovecot (via systemctl): dovecot.service.
root@kertha-VirtualBox:/var/www# /etc/init.d/bind9 restart
[ ok ] Restarting bind9 (via systemctl): bind9.service.
root@kertha-VirtualBox:/var/www#
```

17. Lalu buka browser dan ketikan mail.kertha.com atau ip laptop anda



Konfigurasi Mailist Mailman Server 1 (agus)

1. Install Mailman

```
root@agus-VirtualBox:/var/www# apt-get install mailman
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following packages were automatically installed and are no longer required:
  courier-authdaemon courier-authlib courier-authlib-userdb courier-base
  expect gamin libgamin0 tcl-expect
Use 'sudo apt autoremove' to remove them.
The following additional packages will be installed:
  python-dnspython
Suggested packages:
  spamassassin lynx listadmin
The following NEW packages will be installed:
  mailman python-dnspython
0 upgraded, 2 newly installed, 0 to remove and 178 not upgraded.
Need to get 4.319 kB of archives.
After this operation, 39,3 MB of additional disk space will be used.
Do you want to continue? [Y/n] Y
Get:1 http://id.archive.ubuntu.com/ubuntu xenial/main amd64 python-dnspython
  1.12.0-1 [85,2 kB]
Get:2 http://id.archive.ubuntu.com/ubuntu xenial-updates/main amd64 mailman
  4.12.1-2ubuntu0.6 [4.234 kB]
Fetched 4.319 kB in 26s (161 kB/s)
Preconfiguring packages ...
```

2. Edit konfigurasi mailman pada /etc/mailman/mm_cfg.py. Buka comment pada baris yang berisi “MTA=’Postfix’”

```
mm_cfg.py
/etc/mailman

#-----
# Required when setting any of its arguments.
add_virtualhost(DEFAULT_URL_HOST, DEFAULT_EMAIL_HOST)

#-----
# The default language for this server.
DEFAULT_SERVER_LANGUAGE = 'en'

#-----
# Iirc this was used in pre 2.1, leave it for now
USE_ENVELOPE_SENDER = 0 # Still used?

#-----
# Unset send_reminders on newly created lists
DEFAULT_SEND_REMINDERS = 0

#-----
# Uncomment this if you configured your MTA such that it
# automatically recognizes newly created lists.
# (see /usr/share/doc/mailman/README.Exim4.Debian or
# /usr/share/mailman/postfix-to-mailman.py)
# MTA=None # Misnomer, suppresses alias output on newlist

#-----
# Uncomment if you use Postfix virtual domains (but not
# postfix-to-mailman.py), but be sure to see
# /usr/share/doc/mailman/README.Debian first.
MTA='Postfix'

#-----
# Uncomment if you want to filter mail with SpamAssassin. For
# more information please visit this website:
# http://www.jamesh.id.au/articles/mailman-spamassassin/
```

3. Tambah mailing list baru mailman percobaan

```
root@agusserver1-VirtualBox: /home/agus-server-1
root@agusserver1-VirtualBox:/home/agus-server-1# newlist mailman
Enter the email of the person running the list: siswa@pens.ac.id
Initial mailman password:
Hit enter to notify mailman owner...

root@agusserver1-VirtualBox:/home/agus-server-1#
```

4. Start proses Mailman

```
root@agus-VirtualBox:/var/www#  
root@agus-VirtualBox:/var/www# service mailman start  
root@agus-VirtualBox:/var/www#
```

5. Aktfikan modul cgi pada apache2

```
root@agus-VirtualBox:/var/www# a2enmod cgi  
AH00558: apache2: Could not reliably determine the server's fully qualified domain name, using 127.0.1.1. Set the 'ServerName' directive globally to suppress this message  
Enabling module cgi.  
To activate the new configuration, you need to run:  
service apache2 restart
```

6. Menghubungkan Interface Mailman dengan Apache2

```
root@agus-VirtualBox:/var/www# cp /etc/mailman/apache.conf /etc/apache2/sites-available/mailman.conf  
root@agus-VirtualBox:/var/www# cd /etc/apache2/sites-available/  
root@agus-VirtualBox:/etc/apache2/sites-available# a2ensite mailman.conf  
Enabling site mailman.  
To activate the new configuration, you need to run:  
service apache2 reload
```

7. Restart apache2

```
root@agus-VirtualBox:/etc/apache2/sites-available# /etc/init.d/mailman restart  
[ ok ] Restarting mailman (via systemctl): mailman.service.  
root@agus-VirtualBox:/etc/apache2/sites-available# /etc/init.d/apache2 restart  
[ ok ] Restarting apache2 (via systemctl): apache2.service.
```

8. Cek di browser apakah GUI Mailman sudah berhasil muncul

SquirrelMail 1.4.23 [SVN] x SquirrelMail 1.4.23 [SVN] x Problem loading page x Mailman Administrator Au x +

10.0.2.4/cgi-bin/mailman/admin/mailman

Mailman Administrator Authentication

List Administrator Password:

Important: From this point on, you must have cookies enabled in your browser, otherwise no administrative changes will take effect.

Session cookies are used in Mailman's administrative interface so that you don't need to re-authenticate with every administrative operation. This cookie will expire automatically when you exit your browser, or you can explicitly expire the cookie by hitting the *Logout* link under *Other Administrative Activities* (which you'll see once you successfully log in).

[Mailman list run by tono at agus.com](#)
[Mailman administrative interface \(requires authorization\)](#)
[Overview of all agus.com mailing lists](#)

 version 2.1.20   

9. Mengintegrasikan mailman dan postfix

```
main.cf
/etc/postfix

# See /usr/share/postfix/main.cf.dist for a commented, more complete version

# Debian specific: Specifying a file name will cause the first
# line of that file to be used as the name. The Debian default
# is /etc/mailname.
#myorigin = /etc/mailname

smtpd_banner = $myhostname ESMTP $mail_name (Ubuntu)
biff = no

# appending .domain is the MUA's job.
append_dot_mydomain = no

# Uncomment the next line to generate "delayed mail" warnings
#delay_warning_time = 4h

readme_directory = no

# TLS parameters
smtpd_tls_cert_file=/etc/ssl/certs/ssl-cert-snakeoil.pem
smtpd_tls_key_file=/etc/ssl/private/ssl-cert-snakeoil.key
smtpd_use_tls=yes
smtpd_tls_session_cache_database = btree:${data_directory}/smtpd_scache
smtp_tls_session_cache_database = btree:${data_directory}/smtp_scache

# See /usr/share/doc/postfix/TLS_README.gz in the postfix-doc package for
# information on enabling SSL in the smtp client.

smtpd_relay_restrictions = permit_mynetworks permit_sasl_authenticated defer_unautl
myhostname = agus-VirtualBox
alias_maps = hash:/etc/aliases, hash:/var/lib/mailman/data/aliases
alias_database = hash:/etc/aliases
myorigin = /etc/mailname
mydestination = $myhostname, mail.agus.com, agus.com, agus-VirtualBox, localhost.l
localhost
relayhost =
```

10. Konfigurasi postfix agar bisa berhubungan dengan domain lain

```
root@agus-VirtualBox:/home/agus# postconf -e 'relay_domains = kertha.com'
root@agus-VirtualBox:/home/agus# postconf -e 'mailman_destination_recipient_limit = 1'
```

11. Restart postfix

```
root@agus-VirtualBox:/home/agus# /etc/init.d/postfix restart
[ ok ] Restarting postfix (via systemctl): postfix.service.
root@agus-VirtualBox:/home/agus#
```

12. Tambahkan siswa (laki-laki) pada maillist server 1

```
root@agus-VirtualBox:/home/agus# newlist siswa
Enter the email of the person running the list: tono@agus.com
Initial siswa password:
Hit enter to notify siswa owner...
```

13. Cek email owner via squirrelemail. Email notifikasi assign admin akan didapat apabila pembuatan list berhasil

Folders
Last Refresh:
Fri, 12:15 pm
(Check mail)

- **INBOX** (4)
 Drafts
 Sent
 Trash

Current Folder: INBOX
[Compose](#) [Addresses](#) [Folders](#) [Options](#) [Search](#) [Help](#) [Sign Out](#)
[SquirrelMail](#)

[Message](#)
[List](#) | [Unread](#) | [Delete](#) [Previous](#) | [Next](#) [Forward](#) | [Forward as Attachment](#) | [Reply](#) | [Reply All](#)

Subject: Your new mailing list: siswa
From: mailman-owner@agus.com
Date: Fri, June 25, 2021 11:46 am
To: tono@agus.com
Priority: Normal
Options: [View Full Header](#) | [View Printable Version](#) | [Download this as a file](#)

The mailing list 'siswa' has just been created for you. The following is some basic information about your mailing list.

Your mailing list password is:

siswa

You need this password to configure your mailing list. You also need it to handle administrative requests, such as approving mail if you choose to run a moderated list.

You can configure your mailing list at the following web page:

<http://agus.com/cgi-bin/mailman/admin/siswa>

The web page for users of your mailing list is:

<http://agus.com/cgi-bin/mailman/listinfo/siswa>

You can even customize these web pages from the list configuration page. However, you do need to know HTML to be able to do this.

There is also an email-based interface for users (not administrators) of your list; you can get info about using it by sending a message with just the word 'help' as subject or in the body, to:

siswa-request@agus.com

To unsubscribe a user: from the mailing list 'listinfo' web page, click on or enter the user's email address as if you were that user. Where that user would put in their password to unsubscribe, put in your admin password. You can also use your password to change

14. Login di milist baru dan tambahkan member baru

- [\[Mass Subscription\]](#)
- [Mass Removal](#)
- [Address Change](#)
- [Non-digest options](#)
- [Digest options](#)

- [Content filtering](#)
- [Topics](#)

- [text files](#)
- [Go to list archives](#)
- [Logout](#)

Make your changes in the following section, then submit them using the *Submit Your Changes* button below.

Mass Subscriptions

Subscribe these users now or invite them?	☒ Subscribe ☐ Invite
Send welcome messages to new subscribers?	☐ No ☒ Yes
Send notifications of new subscriptions to the list owner?	☒ No ☐ Yes

Enter one address per line below..

agus@agus.com
tono@agus.com
toni@kertha.com
anton@kertha.com

...or specify a file to upload: No file selected.

Below, enter additional text to be added to the top of your invitation or the subscription notification. Include at least one blank line at the end...

15. Member pada mailist sukses ditambahkan

Make your changes in the following section, then submit them using the *Submit Your Changes* button below.

Membership List

Find member [\(help\)](#):

Search...

[Click here to include the legend for this table.](#)

4 members total										
unsub	member address member name	mod	hide	nomail [reason]	ack	not metoo	nodupes	digest	plain	language
☐	agus@agus.com 	☐	☐	☐	☐	☐	☒	☐	☒	English (USA) ▾
☐	anton@kertha.com 	☐	☐	☐	☐	☐	☒	☐	☒	English (USA) ▾
☐	toni@kertha.com 	☐	☐	☐	☐	☐	☒	☐	☒	English (USA) ▾
☐	tono@agus.com 	☐	☐	☐	☐	☐	☒	☐	☒	English (USA) ▾

Submit Your Changes

Additional Member Tasks

Konfigurasi Mailing Mailman Server 2 (kertha)

1. Install Mailman

```
root@kertha-VirtualBox:/var/www# apt-get install mailman
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following packages were automatically installed and are no longer required:
  courier-authdaemon courier-authlib courier-authlib-userdb courier-base
  expect gamin libgamin0 tcl-expect
Use 'sudo apt autoremove' to remove them.
The following additional packages will be installed:
  python-dnspython
Suggested packages:
  spamassassin lynx listadmin
The following NEW packages will be installed:
  mailman python-dnspython
0 upgraded, 2 newly installed, 0 to remove and 178 not upgraded.
Need to get 4.319 kB of archives.
After this operation, 39,3 MB of additional disk space will be used.
Do you want to continue? [Y/n]
```

2. Edit konfigurasi mailman pada /etc/mailman/mm_cfg.py. Buka comment pada baris yang berisi “MTA=’Postfix”

```
mm_cfg.py
/etc/mailman

#-----
# Default domain for email addresses of newly created MLs
DEFAULT_EMAIL_HOST = 'kertha.com'
#-----
# Default host for web interface of newly created MLs
DEFAULT_URL_HOST = 'kertha.com'
#-----
# Required when setting any of its arguments.
add_virtualhost(DEFAULT_URL_HOST, DEFAULT_EMAIL_HOST)

#-----
# The default language for this server.
DEFAULT_SERVER_LANGUAGE = 'en'

#-----
# Iirc this was used in pre 2.1, leave it for now
USE_ENVELOPE_SENDER = 0 # Still used?

#-----
# Unset send_reminders on newly created lists
DEFAULT_SEND_REMINDERS = 0

#-----
# Uncomment this if you configured your MTA such that it
# automatically recognizes newly created lists.
# (see /usr/share/doc/mailman/README.Exim4.Debian or
# /usr/share/mailman/postfix-to-mailman.py)
# MTA=None # Misnomer, suppresses alias output on newlist

#-----
# Uncomment if you use Postfix virtual domains (but not
# postfix-to-mailman.py), but be sure to see
# /usr/share/doc/mailman/README.Debian first.
MTA='Postfix'
```

3. Tambah mailing list baru mailman percobaan

```
root@kertha-VirtualBox:/var/www# newlist mailman
Enter the email of the person running the list: anton@kertha.com
Initial mailman password:
Hit enter to notify mailman owner...
root@kertha-VirtualBox:/var/www#
```

4. Start proses Mailman

```
root@kertha-VirtualBox:/var/www#
root@kertha-VirtualBox:/var/www# service mailman start
root@kertha-VirtualBox:/var/www#
```

5. Aktifkan modul cgi pada apache2

```
root@kertha-VirtualBox:/var/www#  
root@kertha-VirtualBox:/var/www# a2enmod cgi  
AH00558: apache2: Could not reliably determine the server's fully qualified domain name, using 127.0.1.1. Set the 'ServerName' directive globally to suppress this message  
Enabling module cgi.  
To activate the new configuration, you need to run:  
    service apache2 restart  
root@kertha-VirtualBox:/var/www#  
root@kertha-VirtualBox:/var/www#
```

6. Menghubungkan Interface Mailman dengan Apache2

```
root@kertha-VirtualBox:/var/www# cp /etc/mailman/apache.conf /etc/apache2/sites-available/mailman.conf  
root@kertha-VirtualBox:/var/www# cd /etc/apache2/sites-available/  
root@kertha-VirtualBox:/etc/apache2/sites-available# a2ensite mailman.conf  
Enabling site mailman.  
To activate the new configuration, you need to run:  
    service apache2 reload  
root@kertha-VirtualBox:/etc/apache2/sites-available#  
root@kertha-VirtualBox:/etc/apache2/sites-available#
```

7. Restart apache2

```
bash: /etc/init.d/apache: No such file or directory  
root@kertha-VirtualBox:/etc/apache2/sites-available# /etc/init.d/apache2 restart  
[ ok ] Restarting apache2 (via systemctl): apache2.service.  
root@kertha-VirtualBox:/etc/apache2/sites-available# /etc/init.d/mailman restart  
[ ok ] Restarting mailman (via systemctl): mailman.service.  
root@kertha-VirtualBox:/etc/apache2/sites-available#  
root@kertha-VirtualBox:/etc/apache2/sites-available#
```

8. Cek di browser apakah GUI Mailman sudah berhasil muncul

← → ↻ 🏠 🔒 10.0.2.15/cgi-bin/mailman/admin/mailman ... 🌟 📄 🔄 ☰

Mailman Administrator Authentication

List Administrator Password:

Important: From this point on, you must have cookies enabled in your browser, otherwise no administrative changes will take effect.

Session cookies are used in Mailman's administrative interface so that you don't need to re-authenticate with every administrative operation. This cookie will expire automatically when you exit your browser, or you can explicitly expire the cookie by hitting the *Logout* link under *Other Administrative Activities* (which you'll see once you successfully log in).

[Mailman list run by anton at kertha.com](#)
[Mailman administrative interface \(requires authorization\)](#)
[Overview of all kertha.com mailing lists](#)

 version 2.1.20  python powered   debian POWERED

9. Mengintegrasikan mailman dan postfix

```
smtpd_banner = $myhostname ESMTP $mail_name (Ubuntu)
biff = no

# appending .domain is the MUA's job.
append_dot_mydomain = no

# Uncomment the next line to generate "delayed mail" warnings
#delay_warning_time = 4h

readme_directory = no

# TLS parameters
smtpd_tls_cert_file=/etc/ssl/certs/ssl-cert-snakeoil.pem
smtpd_tls_key_file=/etc/ssl/private/ssl-cert-snakeoil.key
smtpd_use_tls=yes
smtpd_tls_session_cache_database = btree:${data_directory}/smtpd_scache
smtp_tls_session_cache_database = btree:${data_directory}/smtp_scache

# See /usr/share/doc/postfix/TLS_README.gz in the postfix-doc package for
# information on enabling SSL in the smtp client.

smtpd_relay_restrictions = permit_mynetworks permit_sasl_authenticated defer_unautl
myhostname = kertha-VirtualBox
alias_maps = hash:/etc/aliases, hash:/var/lib/mailman/data/aliases
alias_database = hash:/etc/aliases
myorigin = /etc/mailname
mydestination = $myhostname, mail.kertha.com, kertha.com, kertha-VirtualBox,
localhost.localdomain, localhost
relayhost =
mynetworks = 127.0.0.0/8 [::ffff:127.0.0.0]/104 [::1]/128
mailbox_size_limit = 0
recipient_delimiter = +
inet_interfaces = all
inet_protocols = all
home_mailbox = Maildir/
```

Plain Text ▾ Tab Width: 8 ▾ Ln 32, C

Activate Windows

Go to Settings to activate Windows.

10. Konfigurasi postfix agar bisa berhubungan dengan domain lain

```
root@kertha-VirtualBox:/etc/apache2/sites-available#
root@kertha-VirtualBox:/etc/apache2/sites-available# postconf -e 'relay_domains
= agus.com'
root@kertha-VirtualBox:/etc/apache2/sites-available# postconf -e 'mailman_destin
ation_recipient_limit = 1'
root@kertha-VirtualBox:/etc/apache2/sites-available#
root@kertha-VirtualBox:/etc/apache2/sites-available#
```

11. Restart postfix

```
root@kertha-VirtualBox:/etc/apache2/sites-available# /etc/init.d/postfix restart
[ ok ] Restarting postfix (via systemctl): postfix.service.
root@kertha-VirtualBox:/etc/apache2/sites-available#
```

12. Tambahkan siswi (perempuan) pada maillist server 2

```
root@kertha-VirtualBox:/etc/apache2/sites-available#
root@kertha-VirtualBox:/etc/apache2/sites-available# newlist siswi
Enter the email of the person running the list: tina@kertha.com
Initial siswi password:
Hit enter to notify siswi owner...
root@kertha-VirtualBox:/etc/apache2/sites-available#
```

13. Cek email owner via squirrelemail. Email notifikasi assign admin akan didapat apabila pembuatan list berhasil

The screenshot shows a webmail interface with a left sidebar for folders (INBOX, Drafts, Sent, Trash) and a main content area. The current folder is INBOX. An email is displayed with the following details:

- Subject:** Your new mailing list: siswi
- From:** mailman-owner@kertha.com
- Date:** Fri, June 25, 2021 1:59 pm
- To:** tina@kertha.com
- Priority:** Normal
- Options:** [View Full Header](#) | [View Printable Version](#) | [Download this as a file](#)

The email body contains the following text:

The mailing list 'siswi' has just been created for you. The following is some basic information about your mailing list.

Your mailing list password is:

siswi

You need this password to configure your mailing list. You also need it to handle administrative requests, such as approving mail if you choose to run a moderated list.

You can configure your mailing list at the following web page:

<http://kertha.com/cgi-bin/mailman/admin/siswi>

The web page for users of your mailing list is:

<http://kertha.com/cgi-bin/mailman/listinfo/siswi>

You can even customize these web pages from the list configuration page. However, you do need to know HTML to be able to do this.

There is also an email-based interface for users (not administrators) of your list; you can get info about using it by sending a message with just the word 'help' as subject or in the body, to:

siswi-request@kertha.com

To unsubscribe a user: from the mailing list 'listinfo' web page, click on or enter the user's email address as if you were that user. Where that user would put in their password to unsubscribe, put in your admin password. You can also use your password to change member's options, including digestification, delivery disabling, etc.

14. Login di milist baru dan tambahkan member baru

The screenshot shows the 'Mass Subscriptions' page in a web browser. The page has a header with links for 'Non-digest options', 'Digest options', and 'Logout'. Below the header, there is a section titled 'Mass Subscriptions' with a blue background. Under this section, there are three rows of options:

Subscribe these users now or invite them?	☒ Subscribe ☐ Invite
Send welcome messages to new subscribers?	☐ No ☒ Yes
Send notifications of new subscriptions to the list owner?	☒ No ☐ Yes

Below these options, there is a text input field with the placeholder 'Enter one address per line below...'. The field contains the following email addresses:

tina@kertha.com
tini@kertha.com
ana@agus.com
ani@agus.com

Below the input field, there is a button labeled 'Browse...' and the text 'No file selected.'.

Below the 'Browse...' button, there is a text input field with the placeholder 'Below, enter additional text to be added to the top of your invitation or the subscription notification. Include at least one blank line at the end...'. The field is currently empty.

15. Member pada mailing sukses ditambahkan

- [Mass Subscription](#)
- [Mass Removal](#)
- [Address Change](#)
- [Non-digest options](#)
- [Digest options](#)
- [Content filtering](#)
- [Topics](#)
- [text files](#)
- [Go to list archives](#)
- **[Logout](#)**

Make your changes in the following section, then submit them using the *Submit Your Changes* button below.

Membership List

Find member ([help](#)):

[Click here to include the legend for this table.](#)

4 members total										
unsub	member address member name	mod	hide	nomail [reason]	ack	not metoo	nodupes	digest	plain	language
☐	ana@agus.com 	☐	☐	☐	☐	☐	☒	☐	☒	English (USA) ▾
☐	ani@agus.com 	☐	☐	☐	☐	☐	☒	☐	☒	English (USA) ▾
☐	tina@kertha.com 	☐	☐	☐	☐	☐	☒	☐	☒	English (USA) ▾
☐	tini@kertha.com 	☐	☐	☐	☐	☐	☒	☐	☒	English (USA) ▾

Percobaan kirim maillist siswa dan siswa pada kedua server

1. Siswa

a. Kirim dari Server Agus

i. Kirim dari Agus-ServerAgus

mail.agus.com/src/webmail.php

Folders
Last Refresh: Fri, 3:30 pm (Check mail)
- **INBOX** (6)
Drafts
Sent
Trash

Current Folder: **INBOX**
[Compose](#) [Addresses](#) [Folders](#) [Options](#) [Search](#) [Help](#) [Sign Out](#) [SquirrelMail](#)

To: siswa
Cc:
Bcc:
Subject: Kirim ke Siswa dari Server Agus

Priority: Normal Receipt: ☐ On Read ☐ On Delivery

Signature Addresses Save Draft Send

Hai, yang semua siswa. Perkenalkan saya Agus!

Send

ii. Terima

1. Tono-ServerAgus

mail.agus.com/src/webmail.php

Folders
Last Refresh: Fri, 3:34 pm (Check mail)
- **INBOX** (9)
Drafts
Sent
Trash

Current Folder: **INBOX**
[Compose](#) [Addresses](#) [Folders](#) [Options](#) [Search](#) [Help](#) [Sign Out](#) [SquirrelMail](#)

[Toggle All](#) Viewing Messages: 1 to 10 (10 total)

Move Selected To: INBOX Move Forward Transform Selected Messages: Read Unread Delete

From	Date	Subject
agus@agus.com	3:32 pm	[Siswa] Kirim ke Siswa dari Server Agus
tono@agus.com	3:19 pm	[Siswa] HAY SISWA, INI TONO
agus@agus.com	2:22 pm	[Siswa] HAY SEMUA SISWA, INI AGUS :D
siswa-request@agus.com	2:16 pm	Welcome to the "Siswa" mailing list
siswa-bounces@agus.com	2:15 pm	You have been unsubscribed from the Siswa mailing ...
agus@agus.com	12:20 pm	[Siswa] INI AGUS
tono@agus.com	11:47 am	[Siswa] MAU DONG :)
siswa-request@agus.com	11:46 am	Welcome to the "Siswa" mailing list
mailman-owner@agus.com	11:46 am	Your new mailing list: siswa
mailman-owner@agus.com	11:41 am	Your new mailing list: mailman

[Toggle All](#) Viewing Messages: 1 to 10 (10 total)

2. Anton-ServerKertha

← → ↻ 🏠 10.0.2.15/src/webmail.php ... ☆ 📄 🌐

Folders
Last Refresh: Fri, 3:37 pm (Check mail)

- **INBOX** (9)
- Drafts
- Sent
- Trash

Current Folder: **INBOX** [Sign Out](#)

[Compose](#) [Addresses](#) [Folders](#) [Options](#) [Search](#) [Help](#) [SquirrelMail](#)

[Toggle All](#) Viewing Messages: **1 to 9** (9 total)

Move Selected To: Transform Selected Message:

From	Date	Subject
☐ agus@agus.com	3:32 pm	[Siswa] Kirim ke Siswa dari Server Agus
☐ tono@agus.com	3:19 pm	[Siswa] HAY SISWA, INI TONO
☐ agus@agus.com	3:16 pm	[Siswa] INI AGUS
☐ siswa-bounces@agus.com	3:16 pm	You have been unsubscribed from the Siswa mailing ...
☐ agus@agus.com	3:16 pm	[Siswa] HAY SEMUA SISWA, INI AGUS :D
☐ siswa-request@agus.com	3:16 pm	Welcome to the "Siswa" mailing list
☐ siswa-request@agus.com	3:16 pm	Welcome to the "Siswa" mailing list
☐ mailman-owner@kertha.com	1:53 pm	Your new mailing list: mailman
☐ kertha@kertha.com	1:35 pm	HAY KERTHA

[Toggle All](#) Viewing Messages: **1 to 9** (9 total)

3. Toni-ServerKertha

← → ↻ 🏠 mail.kertha.com/src/webmail.php ... ☆ 📄 🌐

Folders
Last Refresh: Fri, 3:38 pm (Check mail)

- **INBOX** (7)
- Drafts
- Sent
- Trash

Current Folder: **INBOX** [Sign Out](#)

[Compose](#) [Addresses](#) [Folders](#) [Options](#) [Search](#) [Help](#) [SquirrelMail](#)

[Toggle All](#) Viewing Messages: **1 to 7** (7 total)

Move Selected To: Transform Selected Message:

From	Date	Subject
☐ agus@agus.com	3:32 pm	[Siswa] Kirim ke Siswa dari Server Agus
☐ tono@agus.com	3:19 pm	[Siswa] HAY SISWA, INI TONO
☐ siswa-bounces@agus.com	3:16 pm	You have been unsubscribed from the Siswa mailing ...
☐ siswa-request@agus.com	3:16 pm	Welcome to the "Siswa" mailing list
☐ siswa-request@agus.com	3:16 pm	Welcome to the "Siswa" mailing list
☐ agus@agus.com	3:16 pm	[Siswa] INI AGUS
☐ agus@agus.com	3:16 pm	[Siswa] HAY SEMUA SISWA, INI AGUS :D

[Toggle All](#) Viewing Messages: **1 to 7** (7 total)

2. Siswi

a. Kirim dari Server Kertha

i. Kiri dari Tina-ServerKertha

Folders
Last Refresh:
Fri, 3:45 pm
(Check mail)

- **INBOX** (4)
Drafts
Sent
Trash

Current Folder: INBOX
[Compose](#) [Addresses](#) [Folders](#) [Options](#) [Search](#) [Help](#) [Sign Out](#) [SquirrelMail](#)

To:
Cc:
Bcc:
Subject: Kirim ke Siswi dari Server Kertha

Priority Receipt: ☐ On Read ☐ On Delivery

Hai semua siswi, perkenalkan saya Tina.

ii. Terima

1. Tini-ServerKertha

Folders
Last Refresh:
Fri, 3:46 pm
(Check mail)

- **INBOX** (5)
Drafts
Sent
Trash

Current Folder: INBOX
[Compose](#) [Addresses](#) [Folders](#) [Options](#) [Search](#) [Help](#) [Sign Out](#) [SquirrelMail](#)

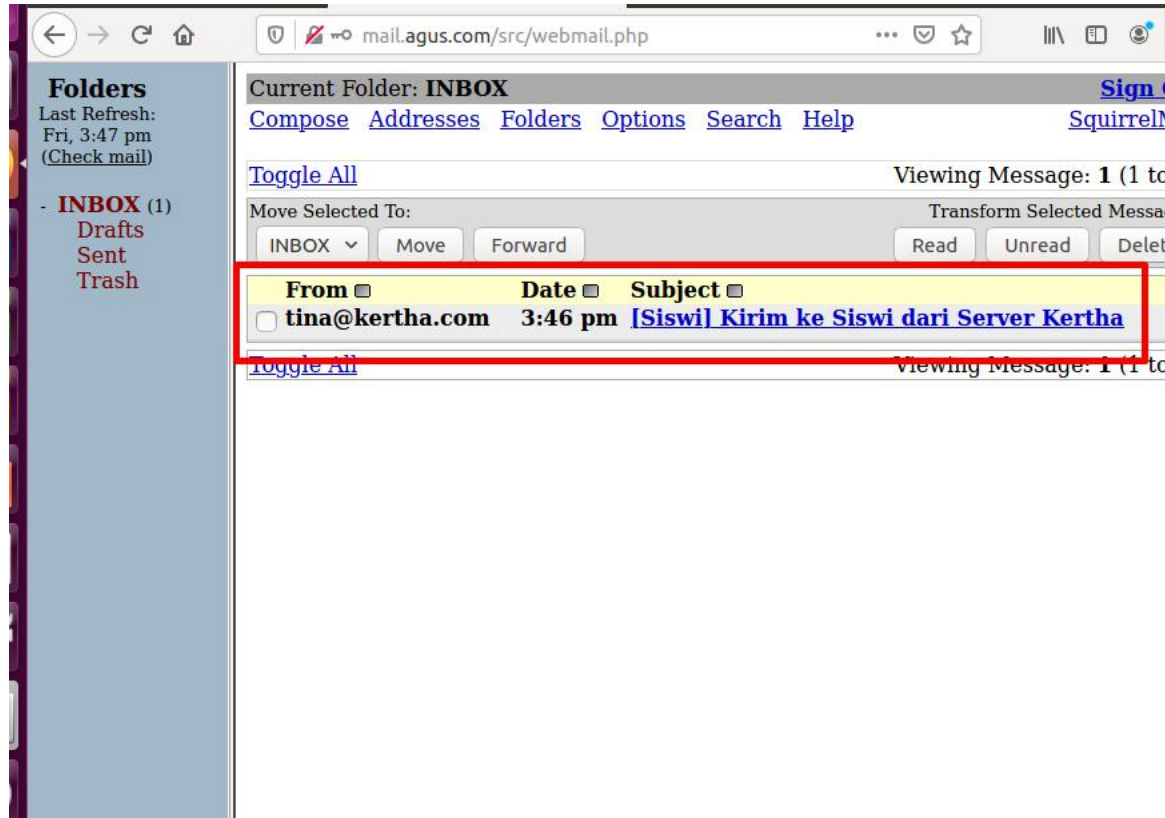
[Toggle All](#) Viewing Messages: 1 to 5 (5 total)

Move Selected To: Transform Selected Message:

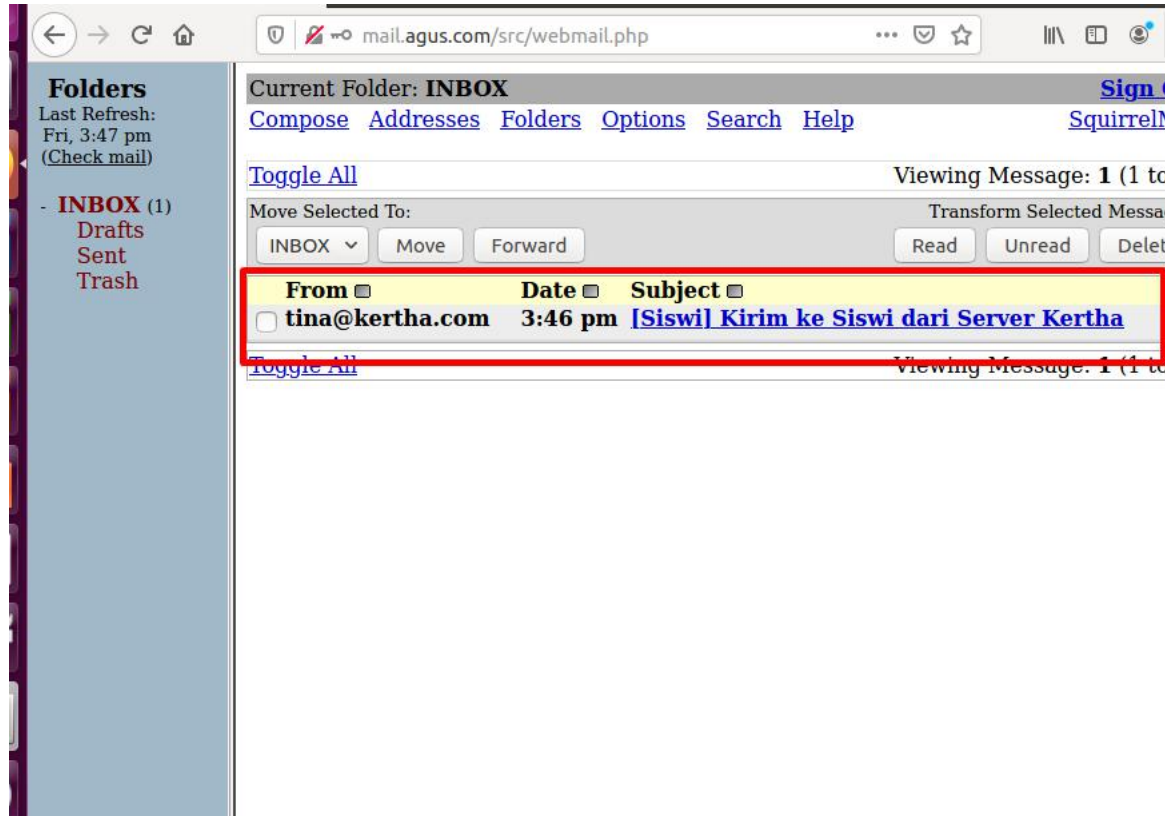
☐	From	Date	Subject
☐	tina@kertha.com	3:46 pm	[Siswi] Kirim ke Siswi dari Server Kertha
☐	siswi-request@kertha.com	2:14 pm	Welcome to the "Siswi" mailing list
☐	siswi-bounces@kertha.com	2:13 pm	You have been unsubscribed from the Siswi mailing ...
☐	tina@kertha.com	2:03 pm	[Siswi] HAY INI TINA
☐	siswi-request@kertha.com	2:01 pm	Welcome to the "Siswi" mailing list

[Toggle All](#) Viewing Messages: 1 to 5 (5 total)

2. Ana-ServerAgus



3. Ani-ServerAgus



Konfigurasi spamassassin

1. Install spamassassin spamc

```
root@agus-VirtualBox: /home/agus
root@agus-VirtualBox:/home/agus# apt-get install spamassassin spamc
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following packages were automatically installed and are no longer required:
  courier-authdaemon courier-authlib courier-authlib-userdb courier-base
  expect gamin libgamin0 tcl-expect
Use 'sudo apt autoremove' to remove them.
The following additional packages will be installed:
  liberror-perl libmail-spf-perl libnetaddr-ip-perl libsys-hostname-long-perl
  re2c sa-compile
Suggested packages:
  razor libdbi-perl pyzor libmail-dkim-perl libencode-detect-perl
The following NEW packages will be installed:
  liberror-perl libmail-spf-perl libnetaddr-ip-perl libsys-hostname-long-perl
  re2c sa-compile spamassassin spamc
0 upgraded, 8 newly installed, 0 to remove and 178 not upgraded.
Need to get 1.608 kB of archives.
After this operation, 5.533 kB of additional disk space will be used.
Do you want to continue? [Y/n]
```

2. Add user spamassassin

```
root@agus-VirtualBox:/home/agus# adduser spamd --disabled-login
Adding user 'spamd' ...
Adding new group 'spamd' (1004) ...
Adding new user 'spamd' (1004) with group 'spamd' ...
Creating home directory '/home/spamd' ...
Copying files from '/etc/skel' ...
Changing the user information for spamd
Enter the new value, or press ENTER for the default
  Full Name []: spamd
  Room Number []:
  Work Phone []:
  Home Phone []:
  Other []:
Is the information correct? [Y/n] Y
root@agus-VirtualBox:/home/agus#
```

3. Konfigurasi spamassassin gedit /etc/default/spamassassin

```
spamassassin
/etc/default

# /etc/default/spamassassin
# Duncan Findlay

# WARNING: please read README.spamd before using.
# There may be security risks.

# If you're using systemd (default for jessie), the ENABLED setting is
# not used. Instead, enable spamd by issuing:
# systemctl enable spamassassin.service
# Change to "1" to enable spamd on systems using sysvinit:
ENABLED=1

# Options
# See man spamd for possible options. The -d option is automatically added.

# SpamAssassin uses a preforking model, so be careful! You need to
# make sure --max-children is not set to anything higher than 5,
# unless you know what you're doing.

SAHOME="/var/log/spamassassin/"
OPTIONS="--create-prefs --max-children 5 --username spamd --helper-home-dir"
#OPTIONS="--create-prefs --max-children 5 --helper-home-dir /home/spamd/ -s /home/spamd/spamd.l

# Pid file
# Where should spamd write its PID to file? If you use the -u or
# --username option above, this needs to be writable by that user.
# Otherwise, the init script will not be able to shut spamd down.
PIDFILE="/var/run/spamd.pid"

# Set nice level of spamd
#NICE="--nicelevel 15"

# Cronjob
# Set to anything but 0 to enable the cron job to automatically update
# spamassassin's rules on a nightly basis
CRON=1
```

4. Aktifkan spamassassin dengan systemctl enable spamassassin.service

```
root@agus-VirtualBox:/home/agus# systemctl enable spamassassin.service
Synchronizing state of spamassassin.service with SysV init with /lib/systemd/sys
temd-sysv-install...
Executing /lib/systemd/systemd-sysv-install enable spamassassin
root@agus-VirtualBox:/home/agus#
```

5. Mengaktifkan rules pada spamassassin

```
local.cf
/etc/spamassassin

#
# Only a small subset of options are listed below
#
#####
# Add *****SPAM***** to the Subject header of spam e-mails
#
rewrite_header Subject *****SPAM*****

#
# Save spam messages as a message/rfc822 MIME attachment instead of
# modifying the original message (0: off, 2: use text/plain instead)
#
# report_safe 1

#
# Set which networks or hosts are considered 'trusted' by your mail
# server (i.e. not spammers)
#
# trusted_networks 212.17.35.

|
#
# Set file-locking method (flock is not safe over NFS, but is faster
#
# lock_method flock

#
# Set the threshold at which a message is considered spam (default:
#
required_score 5.0

#
# Use Bayesian classifier (default: 1)
#
use_bayes 1

#
# Bayesian classifier auto-learning (default: 1)
#
bayes_auto_learn 1
```

6. Konfigurasi pada postfix

```
master.cf
/etc/postfix

#
# Postfix master process configuration file. For details on the format
# of the file, see the master(5) manual page (command: "man 5 master" or
# on-line: http://www.postfix.org/master.5.html).
#
# Do not forget to execute "postfix reload" after editing this file.
#
=====
# service type private unpriv chroot wakeup maxproc command + args
# (yes) (yes) (no) (never) (100)
=====
smtp inet n - y - - smtpd -o content_filter=spamassassin
#smtp inet n - y - - 1 postscreen
#smtpd pass - - y - - smtpd
#dnsblog unix - - y - 0 dnsblog
#tlsproxy unix - - y - 0 tlsproxy
#submission inet n - y - - smtpd
#submission unix - n n - - pipe user=spamd argv=/usr/bin/spamc
-f -e /usr/sbin/sendmail -oi -f ${sender} ${recipient}
# -o syslog_name=postfix/submission
# -o smtpd_tls_security_level=encrypt
# -o smtpd_sasl_auth_enable=yes
# -o smtpd_reject_unlisted_recipient=no
# -o smtpd_client_restrictions=$mua_client_restrictions
# -o smtpd_helo_restrictions=$mua_helo_restrictions
# -o smtpd_sender_restrictions=$mua_sender_restrictions
# -o smtpd_recipient_restrictions=
# -o smtpd_relay_restrictions=permit_sasl_authenticated,reject
# -o milter_macro_daemon_name=ORIGINATING
#smtps inet n - y - - smtpd
# -o syslog_name=postfix/smtps
# -o smtpd_tls_wrappermode=yes
# -o smtpd_sasl_auth_enable=yes
# -o smtpd_reject_unlisted_recipient=no
# -o smtpd_client_restrictions=$mua_client_restrictions
# -o smtpd_helo_restrictions=$mua_helo_restrictions
# -o smtpd_sender_restrictions=$mua_sender_restrictions
# -o smtpd_recipient_restrictions=
# -o smtpd_relay_restrictions=permit_sasl_authenticated,reject
# -o milter_macro_daemon_name=ORIGINATING
.....
```

7. Restart service spamassassin dan postfix

```
root@agus-VirtualBox:/home/agus# /etc/init.d/postfix restart
[ ok ] Restarting postfix (via systemctl): postfix.service.
root@agus-VirtualBox:/home/agus# /etc/init.d/spamassassin restart
[ ok ] Restarting spamassassin (via systemctl): spamassassin.service.
root@agus-VirtualBox:/home/agus#
```