

## INSTAL PAKET

“nano /etc/apt/sources.list”

```
GNU nano 5.4 /etc/apt/sources.list
# deb cdrom:[Debian GNU/Linux 11.0.0 _Bullseye_ - Official amd64 DVD Binary-1 20210814-10:04]/ bull
# deb cdrom:[Debian GNU/Linux 11.0.0 _Bullseye_ - Official amd64 DVD Binary-2 20210814-10:04]/ bull
# deb cdrom:[Debian GNU/Linux 11.0.0 _Bullseye_ - Official amd64 DVD Binary-1 20210814-10:04]/ bull

# deb http://security.debian.org/debian-security bullseye-security main contrib
# deb-src http://security.debian.org/debian-security bullseye-security main contrib

# bullseye-updates, to get updates before a point release is made;
# see https://www.debian.org/doc/manuals/debian-reference/ch02.en.html#_updates_and_backports
# A network mirror was not selected during install. The following entries
# are provided as examples, but you should amend them as appropriate
# for your mirror of choice.
#
# deb http://deb.debian.org/debian/ bullseye-updates main contrib
# deb-src http://deb.debian.org/debian/ bullseye-updates main contrib

deb http://deb.debian.org/debian bullseye main contrib non-free
deb-src http://deb.debian.org/debian bullseye main contrib non-free

deb http://deb.debian.org/debian bullseye-updates main contrib non-free
deb-src http://deb.debian.org/debian bullseye-updates main contrib non-free

deb http://deb.debian.org/debian bullseye-backports main contrib non-free
deb-src http://deb.debian.org/debian bullseye-backports main contrib non-free

deb http://security.debian.org/debian-security/ bullseye-security main contrib non-free
deb-src http://security.debian.org/debian-security/ bullseye-security main contrib non-free
```

“apt update”

“apt upgrade”

“apt install apache2”

“apt install postfix dovecot-imapd dovecot-pop3d”

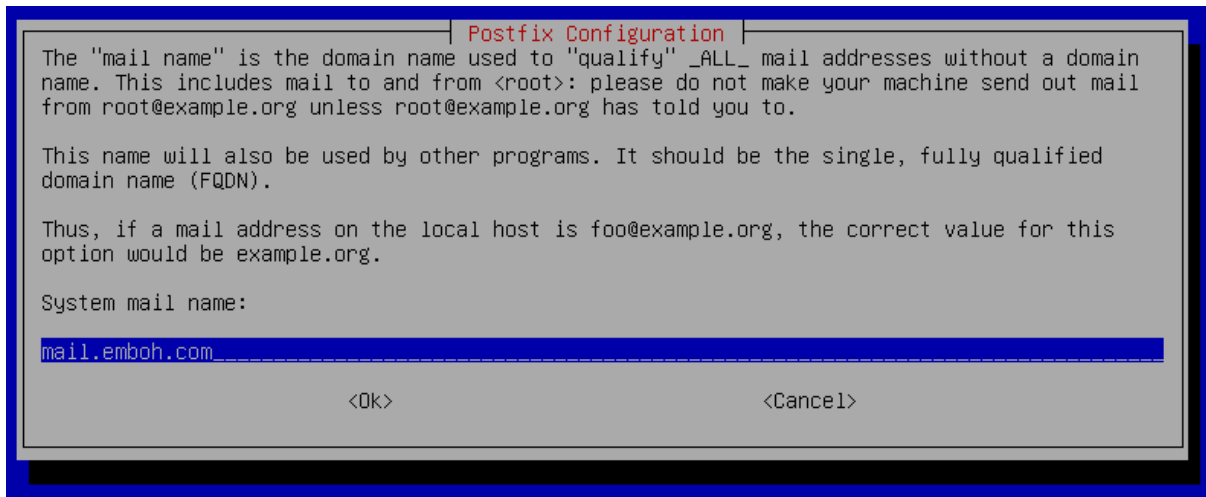
```
Postfix Configuration
Please select the mail server configuration type that best meets your needs.

No configuration:
  Should be chosen to leave the current configuration unchanged.
Internet site:
  Mail is sent and received directly using SMTP.
Internet with smarthost:
  Mail is received directly using SMTP or by running a utility such
  as fetchmail. Outgoing mail is sent using a smarthost.
Satellite system:
  All mail is sent to another machine, called a 'smarthost', for delivery.
Local only:
  The only delivered mail is the mail for local users. There is no network.

General type of mail configuration:

    No configuration
    Internet Site
    Internet with smarthost
    Satellite system
    Local only

    <Ok>                                <Cancel>
```



"nano /etc/postfix/main.cf"

**\*Tambahkan script berikut : home\_mailbox = Maildir/**

```
smtpd_relay_restrictions = permit_mynetworks permit_sasl_authenticated defer_unauth_destination
myhostname = muda.localdomain
alias_maps = hash:/etc/aliases
alias_database = hash:/etc/aliases
myorigin = /etc/mailname
mydestination = muda.localdomain, mail.emboh.com, muda, localhost.localdomain, localhost
relayhost =
mynetworks = 127.0.0.0/8 [::ffff:127.0.0.0]/104 [::1]/128 192.168.10.0/24
mailbox_size_limit = 0
recipient_delimiter = +
inet_interfaces = all
inet_protocols = ipv4
home_mailbox = Maildir/
```

<sup>^</sup>G Help    <sup>^</sup>O Write Out    <sup>^</sup>W Where Is    <sup>^</sup>K Cut    <sup>^</sup>T Execute    <sup>^</sup>C Location    M-U Undo  
<sup>^</sup>X Exit    <sup>^</sup>R Read File    <sup>^</sup>N Replace    <sup>^</sup>U Paste    <sup>^</sup>J Justify    <sup>^</sup>G Go To Line    M-E Redo

"nano /etc/dovecot/dovecot.conf"

```
# Enable installed protocols
!include_try /usr/share/dovecot/protocols.d/*.protocol

# A comma separated list of IPs or hosts where to listen in for connections.
# "*" listens in all IPv4 interfaces, "::" listens in all IPv6 interfaces.
# If you want to specify non-default ports or anything more complex,
# edit conf.d/master.conf.
listen = *
```

"nano /etc/dovecot/conf.d/10-auth.conf"

```
GNU nano 7.2 /etc/dovecot/conf.d/10-auth.conf
##
## Authentication processes
##

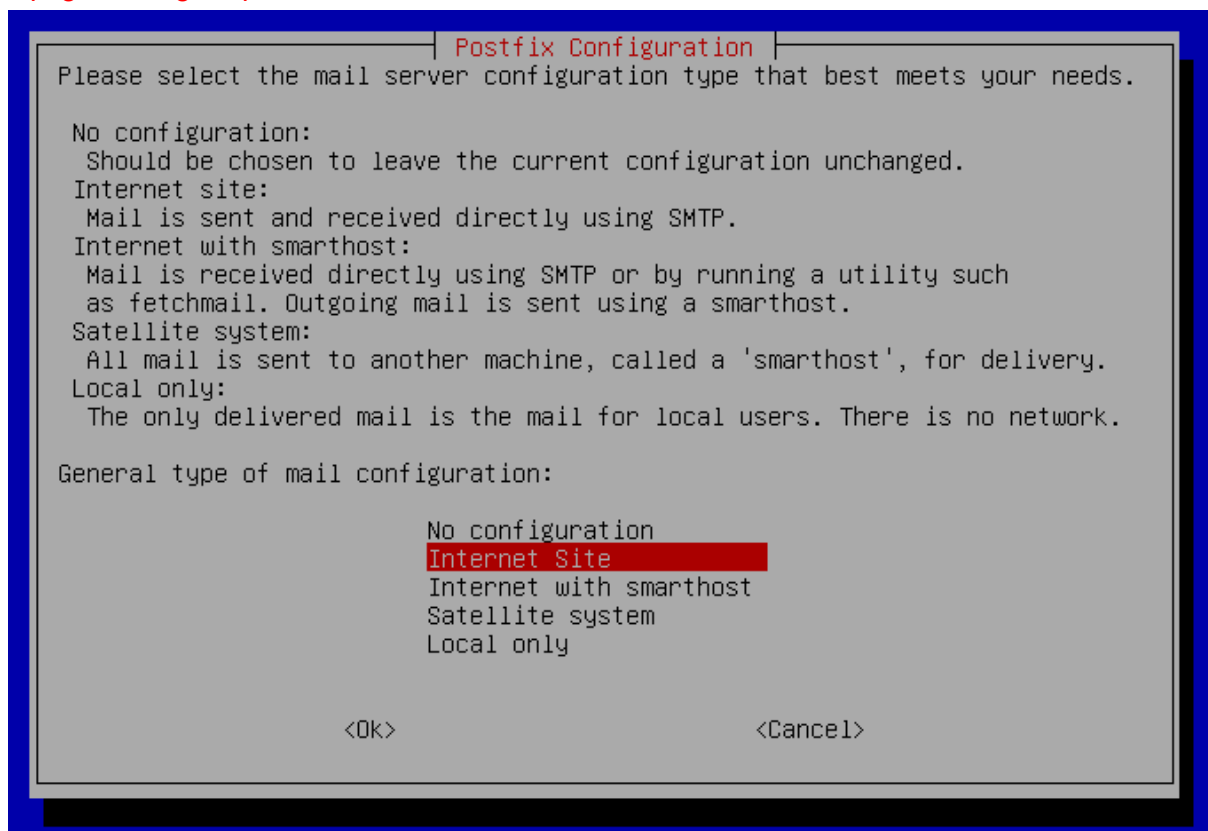
# Disable LOGIN command and all other plaintext authentications unless
# SSL/TLS is used (LOGINDISABLED capability). Note that if the remote IP
# matches the local IP (ie. you're connecting from the same computer), the
# connection is considered secure and plaintext authentication is allowed.
# See also ssl=required setting.
disable_plaintext_auth = yes
```

“nano /etc/dovecot/conf.d/10-mail.conf”

```
GNU nano 7.2 /etc/dovecot/conf.d/10-mail.conf
## Mailbox locations and namespaces
##
# Location for users' mailboxes. The default is empty, which means that Dovecot
# tries to find the mailboxes automatically. This won't work if the user
# doesn't yet have any mail, so you should explicitly tell Dovecot the full
# location.
#
# If you're using mbox, giving a path to the INBOX file (eg. /var/mail/%u)
# isn't enough. You'll also need to tell Dovecot where the other mailboxes are
# kept. This is called the "root mail directory", and it must be the first
# path given in the mail_location setting.
#
# There are a few special variables you can use, eg.:
#
# %u - username
# %n - user part in user@domain, same as %u if there's no domain
# %d - domain part in user@domain, empty if there's no domain
# %h - home directory
#
# See doc/wiki/Variables.txt for full list. Some examples:
#
# mail_location = maildir:~/Maildir
# mail_location = mbox:~/mail:INBOX=/var/mail/%u
# mail_location = mbox:/var/mail/%d/%n/INDEX=/var/indexes/%d/%n/INDEX
#
# <doc/wiki/MailLocation.txt>
#
# mail_location = mbox:~/mail:INBOX=/var/mail/%u
```

“maildirmake.dovecot /etc/skel/Maildir”

“dpkg-reconfigure postfix”



### Postfix Configuration

The "mail name" is the domain name used to "qualify" `_ALL_` mail addresses without a domain name. This includes mail to and from `<root>`: please do not make your machine send out mail from `root@example.org` unless `root@example.org` has told you to.

This name will also be used by other programs. It should be the single, fully qualified domain name (FQDN).

Thus, if a mail address on the local host is `foo@example.org`, the correct value for this option would be `example.org`.

System mail name:

`mail.emboh.com`

<Ok>

<Cancel>

### Postfix Configuration

Mail for the 'postmaster', 'root', and other system accounts needs to be redirected to the user account of the actual system administrator.

If this value is left empty, such mail will be saved in `/var/mail/nobody`, which is not recommended.

Mail is not delivered to external delivery agents as root.

If you already have a `/etc/aliases` file and it does not have an entry for root, then you should add this entry. Leave this blank to not add one.

Root and postmaster mail recipient:

<Ok>

<Cancel>

### Postfix Configuration

Please give a comma-separated list of domains for which this machine should consider itself the final destination. If this is a mail domain gateway, you probably want to include the top-level domain.

Other destinations to accept mail for (blank for none):

`muda.localdomain, mail.emboh.com, muda, localhost.localdomain, localhost`

<Ok>

<Cancel>

**Postfix Configuration**

Please specify the network blocks for which this host should relay mail. The default is just the local host, which is needed by some mail user agents. The default includes local host for both IPv4 and IPv6. If just connecting via one IP version, the unused value(s) may be removed.

If this host is a smarthost for a block of machines, you need to specify the netblocks here, or mail will be rejected rather than relayed.

To use the postfix default (which is based on the connected subnets), leave this blank.

Local networks:

127.0.0.0/8 [::ffff:127.0.0.0]/104 [::1]/128 192.168.10.0/24\_\_\_\_\_

<Ok>                      <Cancel>

**Postfix Configuration**

Please specify the limit that Postfix should place on mailbox files to prevent runaway software errors. A value of zero (0) means no limit. The upstream default is 51200000.

Mailbox size limit (bytes):

0\_\_\_\_\_

<Ok>                      <Cancel>

**Postfix Configuration**

Please choose the character that will be used to define a local address extension.

To not use address extensions, leave the string blank.

Local address extension character:

+\_\_\_\_\_

<Ok>                      <Cancel>

**Postfix Configuration**

By default, whichever Internet protocols are enabled on the system at installation time will be used. You may override this default with any of the following:

all : use both IPv4 and IPv6 addresses;  
 ipv6: listen only on IPv6 addresses;  
 ipv4: listen only on IPv4 addresses.

Internet protocols to use:

all  
 ipv6  
**ipv4**

<Ok>                      <Cancel>

“apt install mariadb-server”

“mysql -u root -p”

- **create database roundcube;**
- **create user 'roundcube'@'localhost' identified by '123';**
- **grant all privileges on roundcube.\* to 'roundcube'@'localhost';**
- **flush privileges;**
- **exit**

```

root@debian:~# mysql -u root -p
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 57
Server version: 10.3.23-MariaDB-0+deb10u1 Debian 10

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]> create database roundcube;
Query OK, 1 row affected (0.000 sec)

MariaDB [(none)]> create user 'roundcube'@'localhost' identified by '123';
Query OK, 0 rows affected (0.000 sec)

MariaDB [(none)]> grant all privileges on roundcube.* to 'roundcube'@'localhost';
Query OK, 0 rows affected (0.000 sec)

MariaDB [(none)]> flush privileges;
Query OK, 0 rows affected (0.001 sec)

MariaDB [(none)]> exit
Bye
root@debian:~# _

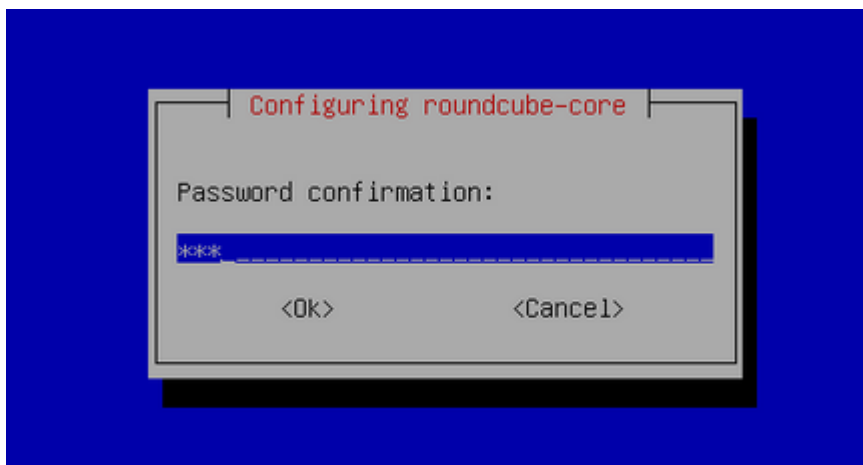
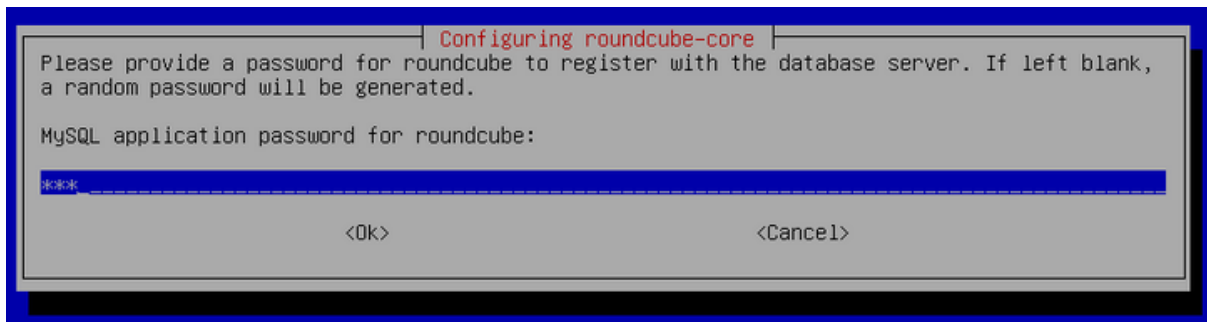
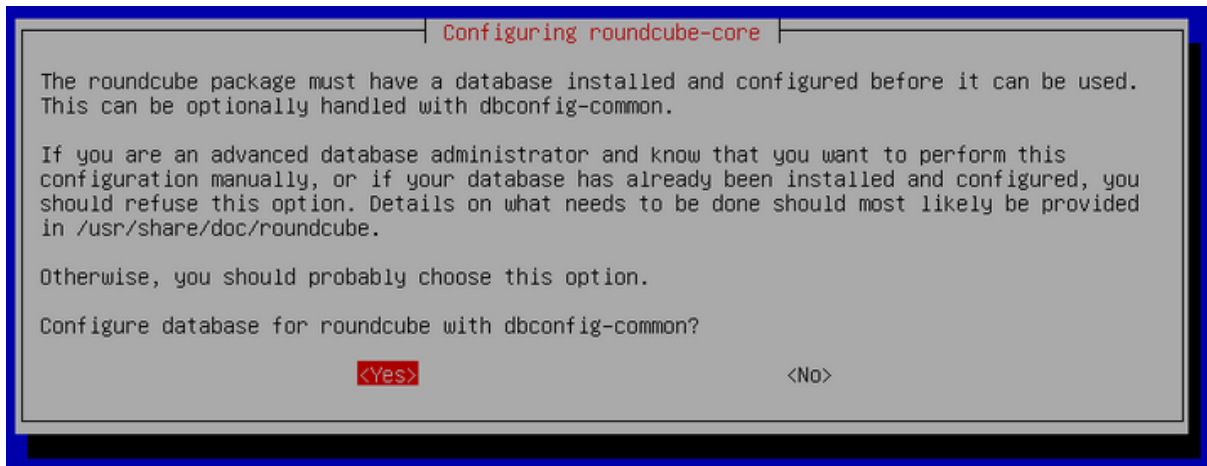
```

### “apt install roundcube”

```

root@debian:~# apt install roundcube
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  aspell aspell-en dbconfig-common fontconfig-config fonts-dejavu-core libapache2-mod-php
  libapache2-mod-php7.3 libaspell15 libfontconfig1 libgd3 libjbig0 libjpeg62-turbo libtiff5
  libwebp6 libxpm4 libxslt1.1 php-auth-sasl php-common php-gd php-intl php-mail-mime php-mbstring
  php-mysql php-net-sieve php-net-smtp php-net-socket php-pear php-pspell php-xml php7.3-cli
  php7.3-common php7.3-gd php7.3-intl php7.3-json php7.3-mbstring php7.3-mysql php7.3-opcache
  php7.3-pspell php7.3-readline php7.3-xml roundcube-core roundcube-mysql
Suggested packages:
  aspell-doc spellutils dbconfig-mysql | dbconfig-pgsql | dbconfig-sqlite | dbconfig-sqlite3
  | dbconfig-no-thanks libgd-tools roundcube-plugins php-net-ldap2 php-crypt-gpg php-net-ldap3
The following NEW packages will be installed:
  aspell aspell-en dbconfig-common fontconfig-config fonts-dejavu-core libapache2-mod-php
  libapache2-mod-php7.3 libaspell15 libfontconfig1 libgd3 libjbig0 libjpeg62-turbo libtiff5
  libwebp6 libxpm4 libxslt1.1 php-auth-sasl php-common php-gd php-intl php-mail-mime php-mbstring
  php-mysql php-net-sieve php-net-smtp php-net-socket php-pear php-pspell php-xml php7.3-cli
  php7.3-common php7.3-gd php7.3-intl php7.3-json php7.3-mbstring php7.3-mysql php7.3-opcache
  php7.3-pspell php7.3-readline php7.3-xml roundcube roundcube-core roundcube-mysql
0 upgraded, 43 newly installed, 0 to remove and 0 not upgraded.
Need to get 0 B/11.8 MB of archives.
After this operation, 45.6 MB of additional disk space will be used.
Do you want to continue? [Y/n] _

```



“nano /etc/roundcube/config.inc.php”

```
GNU nano 5.4 /etc/roundcube/config.inc.php
// %n - hostname ($_SERVER['SERVER_NAME'])
// %t - hostname without the first part
// %d - domain (http hostname $_SERVER['HTTP_HOST'] without the first part)
// %s - domain name after the '@' from e-mail address provided at login screen
// For example %n = mail.domain.tld, %t = domain.tld
$config['default_host'] = 'emboh.com';

// SMTP server host (for sending mails).
// Enter hostname with prefix ssl:// to use Implicit TLS, or use
// prefix tls:// to use STARTTLS.
// Supported replacement variables:
// %h - user's IMAP hostname
// %n - hostname ($_SERVER['SERVER_NAME'])
// %t - hostname without the first part
// %d - domain (http hostname $_SERVER['HTTP_HOST'] without the first part)
// %z - IMAP domain (IMAP hostname without the first part)
// For example %n = mail.domain.tld, %t = domain.tld
$config['smtp_server'] = 'emboh.com';

// SMTP port. Use 25 for cleartext, 465 for Implicit TLS, or 587 for STARTTLS (default)
$config['smtp_port'] = 25;

// SMTP username (if required) if you use %u as the username Roundcube
// will use the current username for login
$config['smtp_user'] = '';

// SMTP password (if required) if you use %p as the password Roundcube
// will use the current user's password for login
$config['smtp_pass'] = '';

// provide an URL where a user can get support for this Roundcube installation
// PLEASE DO NOT LINK TO THE ROUND_CUBE.NET WEBSITE HERE!
$config['support_url'] = '';
```

“cd /etc/apache2/sites-available”

“cp 000-default.conf mail.conf”

“nano mail.conf”

```
GNU nano 5.4 mail.conf
<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 mail.emboh.com

    ServerAdmin webmaster@localhost
    DocumentRoot /var/lib/roundcube
```

“systemctl reload apache2” *\*jika belum bisa direload, langsung reboot, lalu coba lagi*

“a2ensite mail.conf”

```
root@muda:~# cd /etc/apache2/sites-available/
root@muda:/etc/apache2/sites-available# a2ensite mail.conf
Site mail already enabled
root@muda:/etc/apache2/sites-available# _
```



## MEMBUAT USER UNTUK EMAIL

`"adduser contohsatu"`

`"adduser contohdua"`

## INSTAL PAKET BERIKUT

`"apt install dnsutils"`

`"apt install bind9"`

`"apt install openssh-server"`

## KONFIGURASI IP ADDRESS

*\*Setelah semua paket di instal, selanjutnya adalah ubah konfigurasi ip menjadi static*

`"nano /etc/network/interfaces"`

```
GNU nano 5.4 /etc/network/interfaces *
# This file describes the network interfaces available on your system
# and how to activate them. For more information, see interfaces(5).

source /etc/network/interfaces.d/*

# The loopback network interface
auto lo
iface lo inet loopback

# The primary network interface
auto ens33
iface ens33 inet static
    address 192.168.10.2
    netmask 255.255.255.0
```

`"service networking restart"`

## KONFIGURASI WEB SERVER APACHE2

`"cd /var/www/html"`

`"rm index.html"`

```
inet6 fe80::a00:27ff:fe00:69cc/64 scope link
    valid_lft forever preferred_lft forever
root@debian:~# cd /var/www/html
root@debian:/var/www/html# rm index.html
root@debian:/var/www/html# nano index.html
```

`"nano index.html"`

`"<h1><center>Selamat Datang</center></h1>"`

```
GNU nano 5.4 index.html
<h1><center>SELAMAT DATANG</center></h1>
```

“systemctl restart apache2”

*\*Pengetesan di browser*



**SELAMAT DATANG**

## KONFIGURASI DNS/DOMAIN UNTUK WEB SERVER

“cd /etc/bind”

“cp db.local db.emboh”

“cp db.127 db.192”

“nano named.conf”

```
GNU nano 7.2 named.conf.default-zones
// prime the server with knowledge of the root servers
zone "." {
    type hint;
    file "/usr/share/dns/root.hints";
};

// be authoritative for the localhost forward and reverse zones, and for
// broadcast zones as per RFC 1912
zone "localhost" {
    type master;
    file "/etc/bind/db.localhost";
};

zone "127.0.0.1.in-addr.arpa" {
    type master;
    file "/etc/bind/db.127";
};

zone "::1.in-addr.arpa" {
    type master;
    file "/etc/bind/db.1";
};

zone "emboh.com" {
    type master;
    file "/etc/bind/db.emboh";
};

zone "10.168.192.in-addr.arpa" {
    type master;
    file "/etc/bind/db.192";
};

zone "0.in-addr.arpa" {
    type master;
    file "/etc/bind/db.0";
};

zone "255.in-addr.arpa" {
    type master;
    file "/etc/bind/db.255";
};
```

“nano db.emboh”

```
GNU nano 5.4 db.emboh
;
; BIND data file for local loopback interface
;
$TTL      604800
@         IN      SOA      emboh.com. root.emboh.com. (
                        2      ; Serial
                        604800  ; Refresh
                        86400   ; Retry
                        2419200 ; Expire
                        604800 ) ; Negative Cache TTL
;
@         IN      NS       emboh.com.
@         IN      A        192.168.10.2
ns        IN      A        192.168.10.2
www       IN      A        192.168.10.2
mail      IN      A        192.168.10.2
```

“nano db.192”

```
GNU nano 5.4 db.192
;
; BIND reverse data file for local loopback interface
;
$TTL      604800
@         IN      SOA      emboh.com. root.emboh.com. (
                        1      ; Serial
                        604800  ; Refresh
                        86400   ; Retry
                        2419200 ; Expire
                        604800 ) ; Negative Cache TTL
;
@         IN      NS       emboh.com.
1         IN      PTR      www.emboh.com.
1         IN      PTR      mail.emboh.com.
```

“nano /etc/resolv.conf”

```
GNU nano 5.4 /etc/resolv.conf
domain emboh.com
search emboh.com
nameserver 192.168.10.2
```

“systemctl restart bind9”

“nslookup emboh.com”

```
root@debian:/etc/bind# nslookup emboh.com
Server:          192.168.10.2
Address:         192.168.10.2#53

Name:   emboh.com
Address: 192.168.10.2
Name:   emboh.com
Address: ::1

root@debian:/etc/bind# _
```

“nano /etc/apache2/apache2.conf”

```
GNU nano 7.2 /etc/apache2/apache2.conf
# Include list of ports to listen on
Include ports.conf

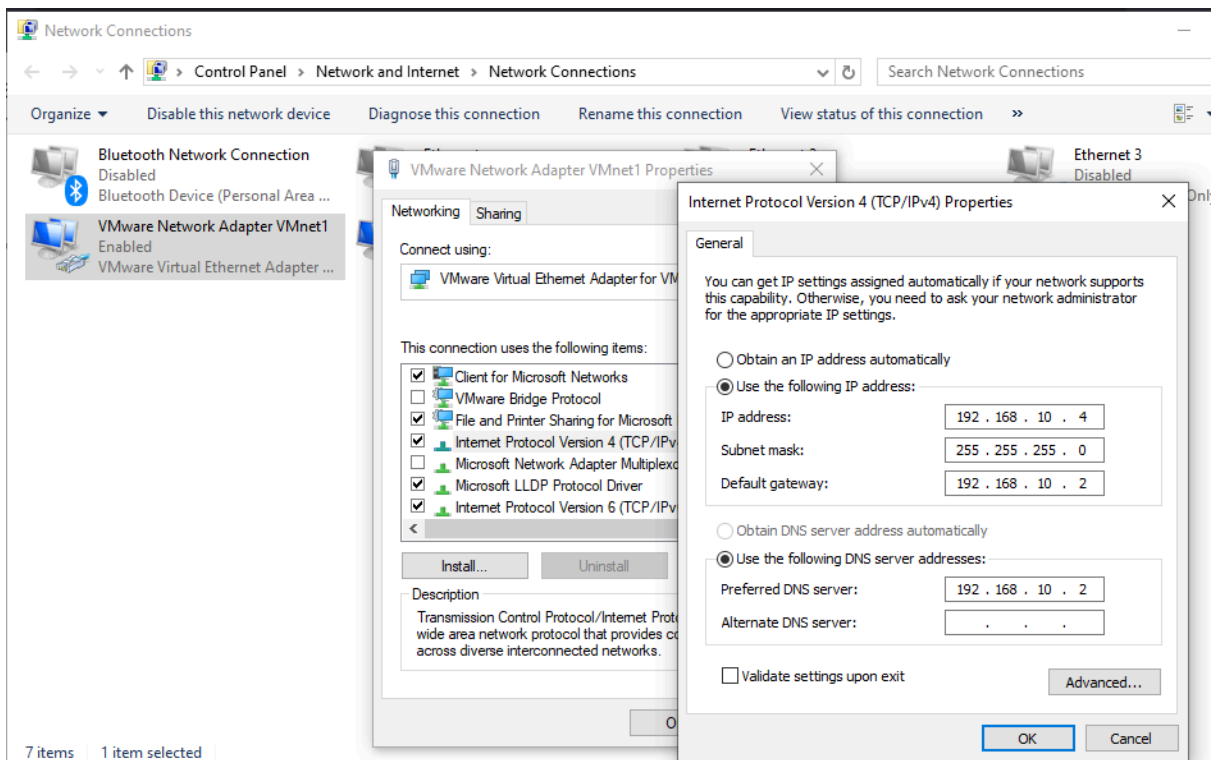
# Sets the default security model of the Apache2 HTTPD server. It does
# not allow access to the root filesystem outside of /usr/share and /var/www.
# The former is used by web applications packaged in Debian,
# the latter may be used for local directories served by the web server. If
# your system is serving content from a sub-directory in /srv you must allow
# access here, or in any related virtual host.
<Directory />
    Options FollowSymLinks
    AllowOverride None
    Require all granted
</Directory>

<Directory /usr/share>
    AllowOverride None
    Require all granted
</Directory>

<Directory /var/www/>
    Options Indexes FollowSymLinks
    AllowOverride None
    Require all granted
</Directory>



#<Directory /srv/>
#    Options Indexes FollowSymLinks
#    AllowOverride None
#    Require all granted
#</Directory>
```

“Menambahkan IP address di komputer client”



## PENGETESAN WEBMAIL



	<input type="text" value="Username"/>
	<input type="password" value="Password"/>
<input type="button" value="LOGIN"/>	

Roundcube Webmail