Frequently Asked Questions (FAQ)

1. **Cara Menyimpan Menggunakan Text Editor Nano**
   Untuk menyimpan dengan cara CTRL + X lalu Y lalu Enter
2. **Tidak Dapat Terhubung ke Internet / Repository**
   a. Pastikan IP Telah Benar
   b. Pastikan Nameserver pada /etc/resolv.conf tidak menggunakan DNS Server Local namun ketika ingin menguji coba DNS Server yang telah kita konfigurasi sendiri dapat menggunakan nameserver sendiri namun tidak dapat terhubung ke Internet
3. **Iqro & Teliti 🙌🏻**
4. **Semangat Teman-Teman 🙌🏻**

1. **Konfigurasi IP Address Static**
    a. Masuk mode **su** terlebih dahulu
    b. Konfigurasi static sesuaikan dengan interface yang akan disetting disini yang akan saya konfigurasi yaitu interface **ens36** untuk melihat nama interface yang akan disetting dapat menggunakan perintah **ip a**

```
2: ens33: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP g
roup default qlen 1000
    link/ether 00:0c:29:83:30:90 brd ff:ff:ff:ff:ff:ff
    altname enp2s1
    inet 192.168.159.130/24 brd 192.168.159.255 scope global dynamic noprefixrou
te ens33
       valid_lft 1798sec preferred_lft 1798sec
    inet 192.168.159.131/24 brd 192.168.159.255 scope global secondary dynamic e
ns33
       valid_lft 1798sec preferred_lft 1798sec
3: ens36: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP g
roup default qlen 1000
    link/ether 00:0c:29:83:30:9a brd ff:ff:ff:ff:ff:ff
    altname enp2s4
    inet 10.252.108.103/24 brd 10.252.108.255 scope global ens36
       valid_lft forever preferred_lft forever
root@debian:~#
```

    c. Buka file konfigurasi untuk **/etc/network/interfaces** dengan menggunakan text editor **nano**

```
root@debian:~# 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

auto ens33
iface ens33 inet dhcp

auto ens36
iface ens36 inet static
        address 10.252.108.103
        netmask 255.255.255.0
        gateway 10.252.108.1
```

    d. Restart Service Networking dengan perintah **systemctl restart networking** jika failed abaikan terlebih dahulu

```
root@debian:~# systemctl restart networking
Job for networking.service failed because the control process exited with error
code.
See "systemctl status networking.service" and "journalctl -xe" for details.
```

    e. Validasi Konfigurasi IP Static telah sesuai dengan menggunakan perintah **ip a** dan lihat konfigurasi IP yang telah dilakukan pada poin **c**

```
2: ens33: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP g
roup default qlen 1000
    link/ether 00:0c:29:83:30:90 brd ff:ff:ff:ff:ff:ff
    altname enp2s1
    inet 192.168.159.130/24 brd 192.168.159.255 scope global dynamic noprefixrou
te ens33
       valid_lft 1798sec preferred_lft 1798sec
    inet 192.168.159.131/24 brd 192.168.159.255 scope global secondary dynamic e
ns33
       valid_lft 1798sec preferred_lft 1798sec
3: ens36: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP g
roup default qlen 1000
    link/ether 00:0c:29:83:30:9a brd ff:ff:ff:ff:ff:ff
    altname enp2s4
    inet 10.252.108.103/24 brd 10.252.108.255 scope global ens36
       valid_lft forever preferred_lft forever
root@debian:~#
```

2. **Konfigurasi SSH Server**
    a. Masuk mode **su** terlebih dahulu
    b. Lakukan update terlebih dahulu dengan perintah **apt-get update**
    c. Lakukan install package ssh dengan perintah **apt-get install openssh-server -y**

```
root@debian:~# apt-get install openssh-server
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  openssh-sftp-server runit-helper
Suggested packages:
  molly-guard monkeysphere ssh-askpass ufw
The following NEW packages will be installed:
  openssh-server openssh-sftp-server runit-helper
0 upgraded, 3 newly installed, 0 to remove and 0 not upgraded.
Need to get 446 kB of archives.
After this operation, 1,765 kB of additional disk space will be used.
Do you want to continue? [Y/n]
```

    d. Setelah selesai instalasi buka file konfigurasi **ssh** pada **/etc/ssh/sshd_config** dengan menggunakan text editor **nano**

```
root@debian:~# nano /etc/ssh/sshd_config
```

        a. Sebelum Konfigurasi :

```
  GNU nano 5.4                    /etc/ssh/sshd_config

#HostKey /etc/ssh/ssh_host_rsa_key
#HostKey /etc/ssh/ssh_host_ecdsa_key
#HostKey /etc/ssh/ssh_host_ed25519_key

# Ciphers and keying
#RekeyLimit default none

# Logging
#SyslogFacility AUTH
#LogLevel INFO

# Authentication:

#LoginGraceTime 2m
#PermitRootLogin prohibit-password
#StrictModes yes
#MaxAuthTries 6
#MaxSessions 10

^G Help      ^O Write Out ^W Where Is  ^K Cut       ^T Execute   ^C Location
^X Exit      ^R Read File ^\ Replace   ^U Paste     ^J Justify   ^_ Go To Line
```

        b. Sesudah Konfigurasi :

```
  GNU nano 5.4                    /etc/ssh/sshd_config *
#HostKey /etc/ssh/ssh_host_rsa_key
#HostKey /etc/ssh/ssh_host_ecdsa_key
#HostKey /etc/ssh/ssh_host_ed25519_key

# Ciphers and keying
#RekeyLimit default none

# Logging
#SyslogFacility AUTH
#LogLevel INFO

# Authentication:

#LoginGraceTime 2m
PermitRootLogin yes
#StrictModes yes
#MaxAuthTries 6
#MaxSessions 10

#PubkeyAuthentication yes

^G Help      ^O Write Out ^W Where Is  ^K Cut       ^T Execute   ^C Location
^X Exit      ^R Read File ^\ Replace   ^U Paste     ^J Justify   ^_ Go To Line
```

e. Setelah selesai konfigurasi ssh maka restart service ssh dengan menggunakan perintah **systemctl restart ssh**

```
root@debian:~# systemctl restart ssh
```

3. **Konfigurasi DNS Server**
   a. Masuk mode **su** terlebih dahulu
   b. Lakukan install package dns server dengan perintah **apt-get install bind9 dnsutils -y**

```
root@debian:~# apt-get install bind9 dnsutils
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  bind9-utils python3-ply
Suggested packages:
  bind-doc resolvconf ufw python-ply-doc
The following NEW packages will be installed:
  bind9 bind9-utils dnsutils python3-ply
0 upgraded, 4 newly installed, 0 to remove and 0 not upgraded.
Need to get 1,246 kB of archives.
After this operation, 2,612 kB of additional disk space will be used.
Do you want to continue? [Y/n]
```

   c. Konfigurasi domain yang akan kita pakai disini saya memakai domain **amj-2022.ita** buka file konfigurasi /etc/bind/named.conf.local

```
root@debian:~# nano /etc/bind/named.conf.local
```

```
  GNU nano 5.4                  /etc/bind/named.conf.local *
//
// 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 "amj-2022.ita" {
        type master;
        file "/var/cache/bind/amj-2022.ita.db";
};
```

   d. Copy **Record Resource** yang semula pada **/etc/bind/db.local** menuju ke direktori **/var/cache/bind/** menggunakan perintah seperti dibawah ini dan sesuaikan seperti konfigurasi point **c** pada bagian file

```
root@debian:~# cp /etc/bind/db.local /var/cache/bind/amj-2022.ita.db
```

e. Konfigurasi **Record Resource** yang telah dicopy pada direktori **/var/cache/bind** disini saya menamai file tersebut dengan **amj-2022.ita.db** dan edit menggunakan text editor **nano**

```
root@debian:~# nano /var/cache/bind/amj-2022.ita.db
```

a. Sebelum Konfigurasi :

```
  GNU nano 5.4                /var/cache/bind/amj-2022.ita.db
;
; BIND data file for local loopback interface
;
$TTL    604800
@       IN      SOA     localhost. root.localhost. (
                              2         ; Serial
                         604800         ; Refresh
                          86400         ; Retry
                        2419200         ; Expire
                         604800 )       ; Negative Cache TTL
;
@       IN      NS      localhost.
@       IN      A       127.0.0.1
@       IN      AAAA    ::1
```

b. Sesudah Konfigurasi :

```
  GNU nano 5.4                /var/cache/bind/amj-2022.ita.db *
;
; BIND data file for local loopback interface
;
$TTL    604800
@       IN      SOA     amj-2022.ita. root.amj-2022.ita. (
                              2         ; Serial
                         604800         ; Refresh
                          86400         ; Retry
                        2419200         ; Expire
                         604800 )       ; Negative Cache TTL
;
@       IN      NS      amj-2022.ita.
@       IN      A       10.252.108.103
@       IN      AAAA    ::1
@       IN      MX 10   mail.amj-2022.ita.
mail    IN      A       10.252.108.103
webmin  IN      A       10.252.108.103
```

Pastikan nama **domain** paling **akhir** terdapat **Titik (.)**
IP **10.252.108.103** didapat dari mana ? Sesuaikan dengan konfigurasi pada point **1.c** yang konfigurasi **IP Static**. Untuk melihat konfigurasi IP di Komputer dengan cara **ip a** di terminal

f. Konfigurasi **DNS Forward** pada file **/etc/bind/named.conf.options** dengan menggunakan text editor **nano**

```
root@debian:/home/aan# nano /etc/bind/named.conf.options
```

```
  GNU nano 3.2          /etc/bind/named.conf.options          Modified

options {
        directory "/var/cache/bind";

        // If there is a firewall between you and nameservers you want
        // to talk to, you may need to fix the firewall to allow multiple
        // ports to talk.  See http://www.kb.cert.org/vuls/id/800113

        // If your ISP provided one or more IP addresses for stable
        // nameservers, you probably want to use them as forwarders.
        // Uncomment the following block, and insert the addresses replacing
        // the all-0's placeholder.

        forwarders {
                202.9.85.4;
        };
```

g. Setelah konfigurasi selesai **restart** service **bind9** menggunakan perintah **systemctl restart bind9**

```
root@debian:~# systemctl restart bind9
```

h. Setelah restart konfigurasi DNS ganti **nameserver** terlebih dahulu pada file **/etc/resolv.conf**

```
root@debian:~# nano /etc/resolv.conf
```

a. Sebelum Konfigurasi :

```
  GNU nano 5.4                          /etc/resolv.conf
domain localdomain
search localdomain
nameserver 192.168.159.2
```

PERINGATAN : Catat **nameserver** lama terlebih dahulu agar saat **instalasi paket selanjutnya** yang membutuhkan **internet tetap dapat terhubung**

b. Sesudah Konfigurasi :

```
  GNU nano 5.4                          /etc/resolv.conf *
#domain localdomain
#search localdomain
#nameserver 192.168.159.2
nameserver 10.252.108.103
```

Sesuaikan IP yang telah dikonfigurasi pada **Record Resource**

i. Untuk **Uji Coba DNS Server** dengan menggunakan perintah **nslookup**

```
root@debian:~# nslookup mail.amj-2022.ita
Server:         10.252.108.103
Address:        10.252.108.103#53

Name:   mail.amj-2022.ita
Address: 10.252.108.103
```

Jika tampilan seperti diatas maka dipastikan berhasil men-konfigurasi DNS Server. Pastikan server dan address pada **kasus kali ini** sama dengan yang dikonfigurasi pada **Record Resource**

4. Konfigurasi Mail Server dengan HTTPS

a. Masuk mode **su** terlebih dahulu

b. Jangan lupa mengembalikan **nameserver** lama yang telah anda catat pada file **/etc/resolv.conf** agar dapat terhubung ke internet

```
  GNU nano 5.4                          /etc/resolv.conf *
#domain localdomain
#search localdomain
nameserver 192.168.159.2
#nameserver 10.252.108.103
```

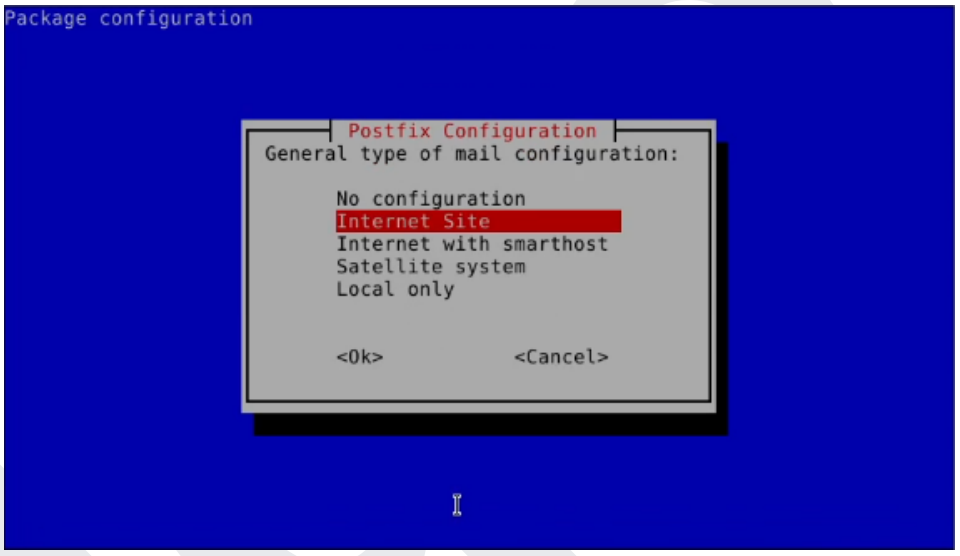
c. Lakukan update terlebih dahulu dengan perintah **apt-get update**

d. Lakukan install package mail server dan dependency

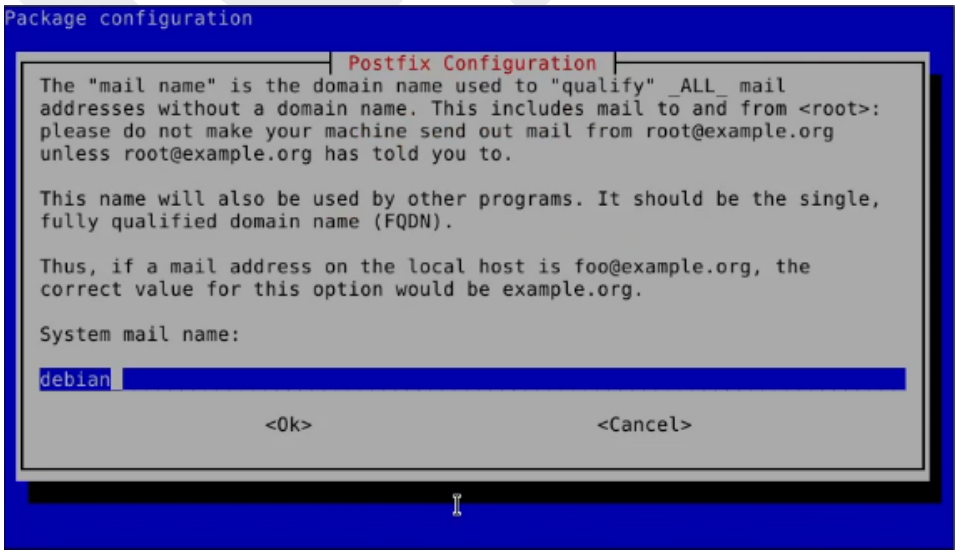
```
root@debian:~# apt-get install postfix courier-imap mariadb-server roundcube
```

Jika Muncul Pesan Seperti Di Bawah **No**

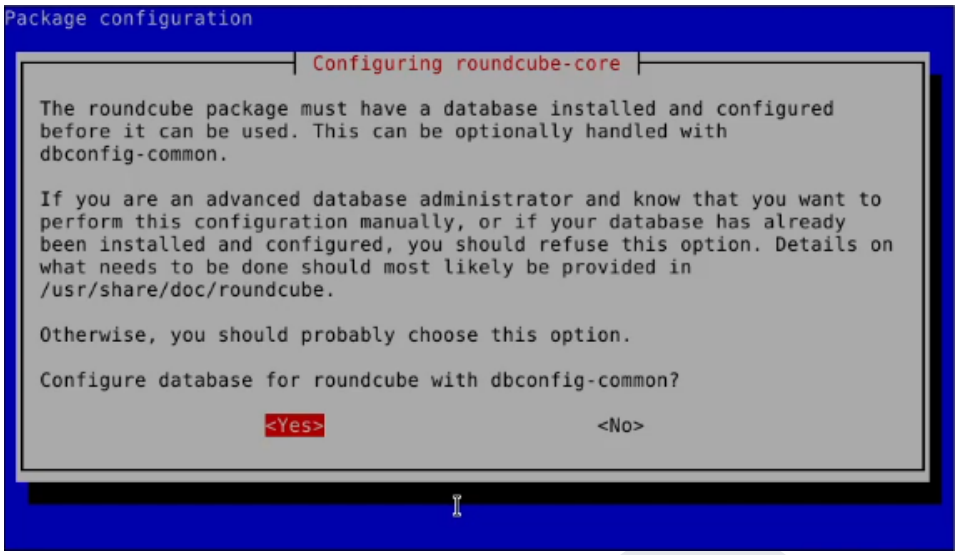
Jika Muncul Pesan Seperti Di Bawah Pilih **Internet Only**



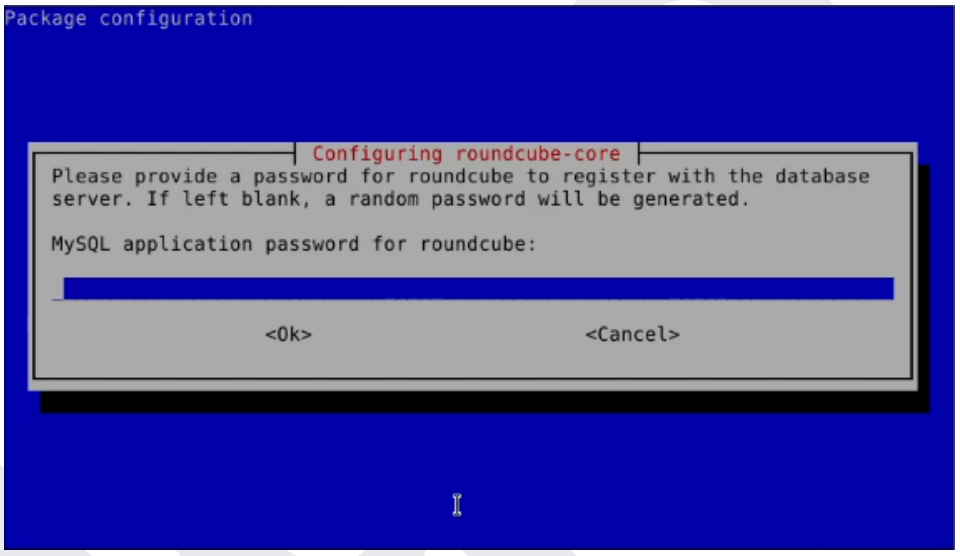
Tidak usah diganti langsung **Enter**



Jika Muncul Pesan Seperti Di Bawah **Yes**



Jika Muncul Pesan Seperti Di Bawah **OK**



e. Setelah itu buka direktori **/etc/skel** dan buat folder **Maildir** dengan menggunakan perintah **maildirmake Maildir**

f. Buat **user1** dan **user2** dengan perintah **adduser <namauserbaru>**
*** tanpa menggunakan tanda < > ***

```
root@debian:/etc/skel# adduser user1
Adding user `user1' ...
Adding new group `user1' (1001) ...
Adding new user `user1' (1001) with group `user1' ...
Creating home directory `/home/user1' ...
Copying files from `/etc/skel' ...
New password:
Retype new password:
passwd: password updated successfully
Changing the user information for user1
Enter the new value, or press ENTER for the default
        Full Name []:
        Room Number []:
        Work Phone []:
        Home Phone []:
        Other []:
Is the information correct? [Y/n] Y
root@debian:/etc/skel# adduser user2
Adding user `user2' ...
Adding new group `user2' (1002) ...
Adding new user `user2' (1002) with group `user2' ...
Creating home directory `/home/user2' ...
Copying files from `/etc/skel' ...
New password:
```

g. Buka konfigurasi **postfix** terletak di **/etc/postfix/main.cf**

```
root@debian:/etc/skel# nano /etc/postfix/main.cf
```

h. Scroll ke bagian paling bawah seperti gambar dibawah

```
  GNU nano 5.4                    /etc/postfix/main.cf


smtpd_relay_restrictions = permit_mynetworks permit_sasl_authenticated defer_un>
myhostname = debian
alias_maps = hash:/etc/aliases
alias_database = hash:/etc/aliases
mydestination = $myhostname, debian, 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
```

i. Sesuaikan konfigurasi seperti dibawah

```
  GNU nano 5.4                    /etc/postfix/main.cf *


smtpd_relay_restrictions = permit_mynetworks permit_sasl_authenticated defer_un>
myhostname = amj-2022.ita
alias_maps = hash:/etc/aliases
alias_database = hash:/etc/aliases
mydestination = $myhostname, debian, localhost.localdomain, , localhost, amj-20>
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/
mailbox_command =
```

amj-2022.ita

j. **Restart Service Postfix** dengan perintah **systemctl restart postfix**

```
root@debian:/etc/skel# systemctl restart postfix
```

k. Konfigurasi **Roundcube** yang terletak pada **/etc/roundcube/config.inc.php** dan cari bagian seperti dibawah ini lalu sesuaikan seperti dibawah ini

```
root@debian:/etc/skel# nano /etc/roundcube/config.inc.php
```

```
  GNU nano 5.4                /etc/roundcube/config.inc.php *
// %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'] = 'localhost';

// SMTP port. Use 25 for cleartext, 465 for Implicit TLS, or 587 for STARTTLS (>
$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'] = '';
```

l. Konfigurasi SSL untuk domain **mail.amj-2022.ita** yaitu masuk ke direktori **/etc/apache2/sites-available/**

```
root@debian:/etc/skel# cd /etc/apache2/sites-available/
root@debian:/etc/apache2/sites-available# ls
000-default.conf  default-ssl.conf
```

m. Duplikat konfigurasi **default-ssl.conf** menjadi **mail-ssl.conf**

```
root@debian:/etc/apache2/sites-available# cp default-ssl.conf mail-ssl.conf
```

n. Konfigurasi **mail-ssl.conf** menggunakan **nano** pastikan anda telah berada di direktori **/etc/apache/sites-available/**

```
root@debian:/etc/apache2/sites-available# nano mail-ssl.conf
```

Sesuaikan ServerAdmin, ServerName, ServerAlias, dan DocumentRoot seperti dibawah

```
  GNU nano 5.4                          mail-ssl.conf *
<IfModule mod_ssl.c>
        <VirtualHost _default_:443>
                ServerAdmin webmaster@amj-2022.ita
                ServerName mail.amj-2022.ita
                ServerAlias mail.amj-2022.ita

                DocumentRoot /usr/share/roundcube
```

o. Nyalakan module **ssl** dengan menggunakan perintah **a2enmod ssl**

```
root@debian:/etc/apache2/sites-available# a2enmod ssl
Considering dependency setenvif for ssl:
Module setenvif already enabled
Considering dependency mime for ssl:
Module mime already enabled
Considering dependency socache_shmcb for ssl:
Enabling module socache_shmcb.
Enabling module ssl.
See /usr/share/doc/apache2/README.Debian.gz on how to configure SSL and create s
elf-signed certificates.
To activate the new configuration, you need to run:
  systemctl restart apache2
```

p. Nyalakan konfigurasi **mail-ssl.conf** dengan menggunakan perintah **a2ensite mail-ssl.conf** pastikan anda telah berada di direktori **/etc/apache/sites-available/**

```
root@debian:/etc/apache2/sites-available# a2ensite mail-ssl.conf
Enabling site mail-ssl.
To activate the new configuration, you need to run:
  systemctl reload apache2
root@debian:/etc/apache2/sites-available#
```

q. **Restart Service Apache2** dengan perintah **systemctl restart apache2**

```
root@debian:/etc/apache2/sites-available# systemctl restart apache2
```

r. Setelah restart konfigurasi **Apache2** ganti **nameserver** terlebih dahulu pada file **/etc/resolv.conf**

```
root@debian:~# nano /etc/resolv.conf
```

c. Sebelum Konfigurasi :

```
  GNU nano 5.4                          /etc/resolv.conf
domain localdomain
search localdomain
nameserver 192.168.159.2
```

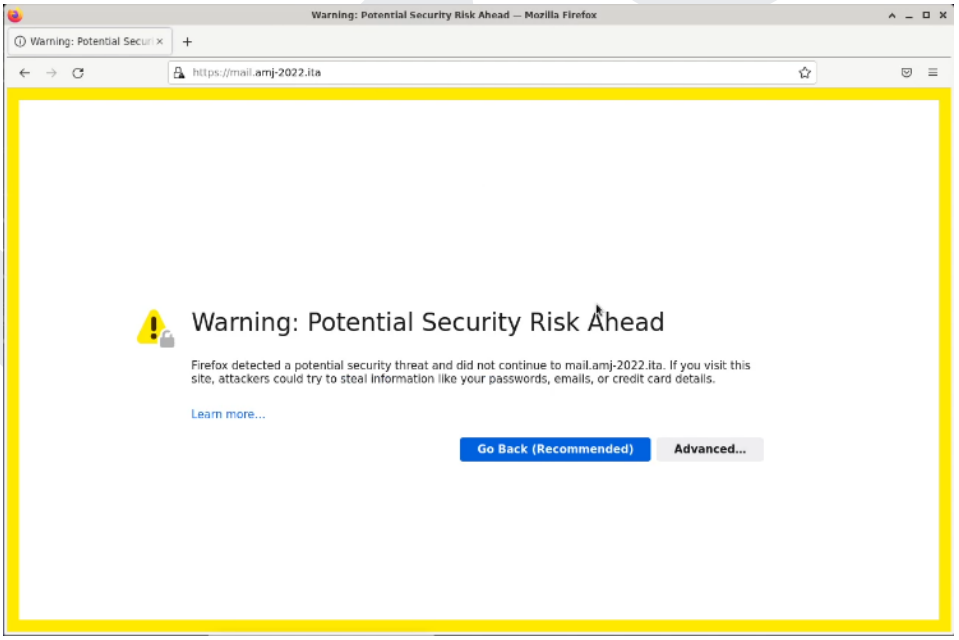
PERINGATAN : Catat **nameserver** lama terlebih dahulu agar saat **instalasi paket selanjutnya** yang membutuhkan **internet tetap dapat terhubung**

d. Sesudah Konfigurasi :

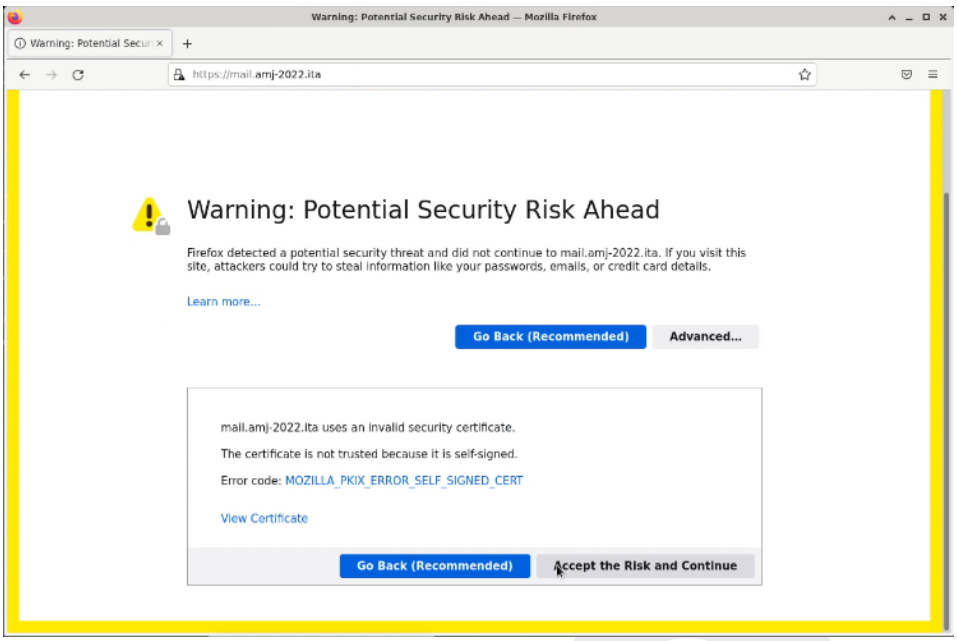
```
  GNU nano 5.4                          /etc/resolv.conf *
#domain localdomain
#search localdomain
#nameserver 192.168.159.2
nameserver 10.252.108.103
```

Sesuaikan IP yang telah dikonfigurasi pada **Record Resource**

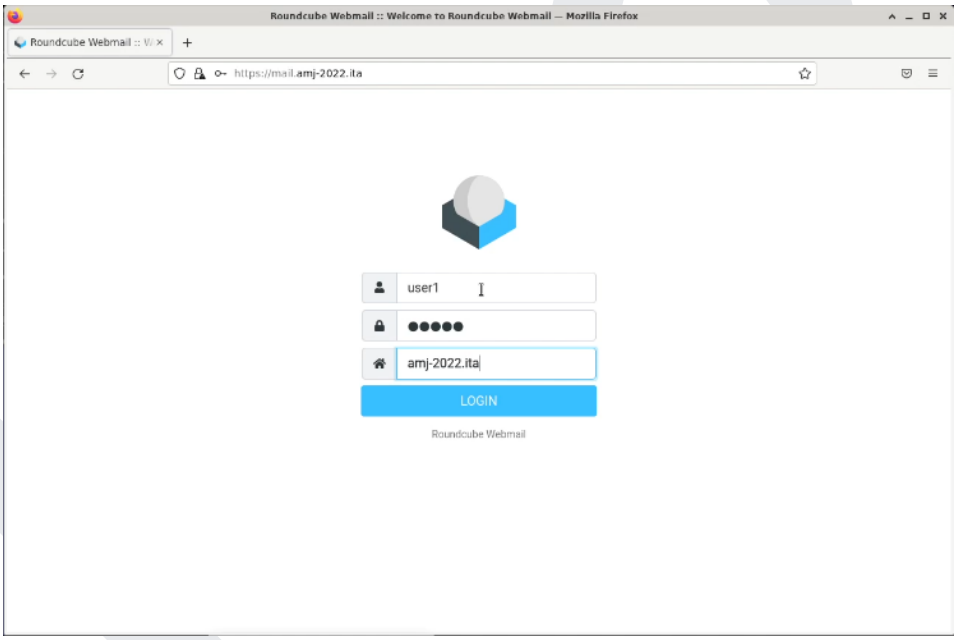
s. Setelah mengganti **nameserver** pada **/etc/resolv.conf** lakukan uji coba dengan membuka browser setelah itu mengetikkan domain dengan format **https://mail.amj-2022.ita**



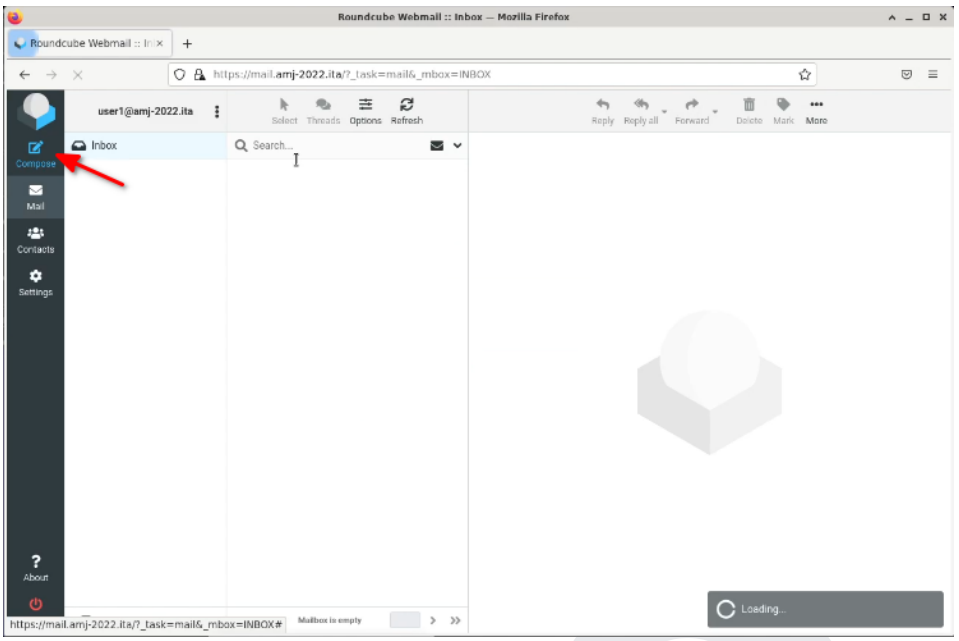
Setelah Tampil Seperti Diatas Klik **Advanced**



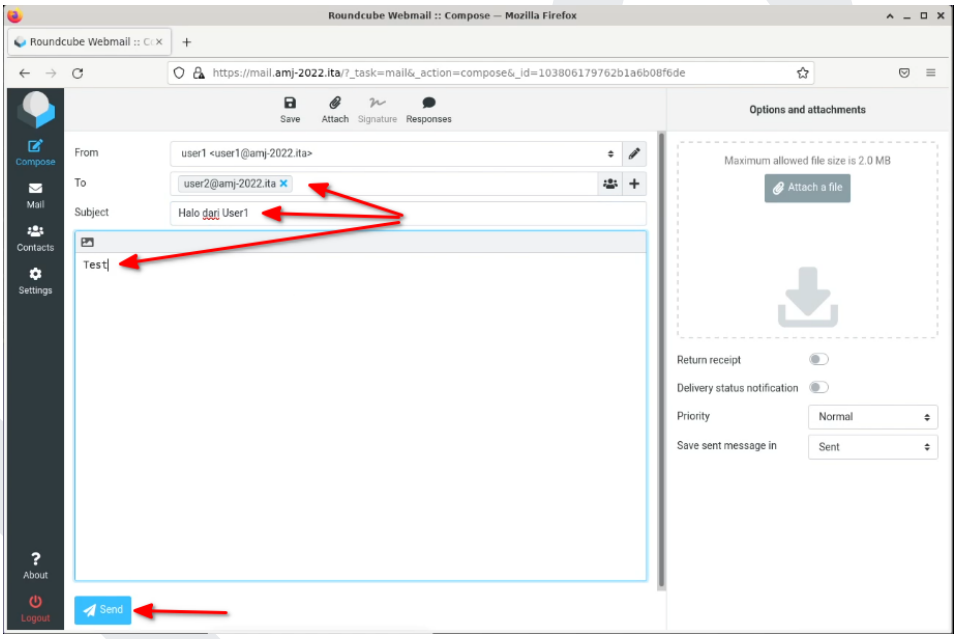
Setelah Tampil Seperti Diatas Klik **Accept the Risk and Continue**



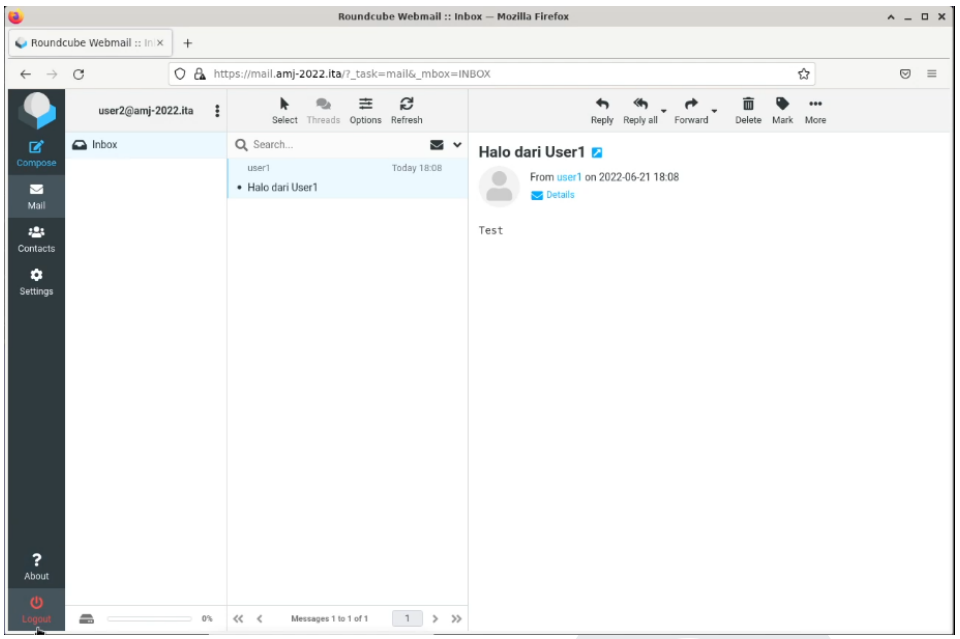
Jika tampil seperti diatas masukkan user yang telah dibuat tadi pada contoh diatas menggunakan **username : user1** dan **password : user1** lalu bagian **server : amj-2022.ita**



Setelah berhasil login lalu klik compose untuk mengirim pesan baru



Lalu isi bagian to kepada **user2**, dan isi **subject**, lalu isi **pesan** jika sudah klik **Send.** Setelah itu **log out** dan **login** menggunakan **user2** dan check inbox pada user2

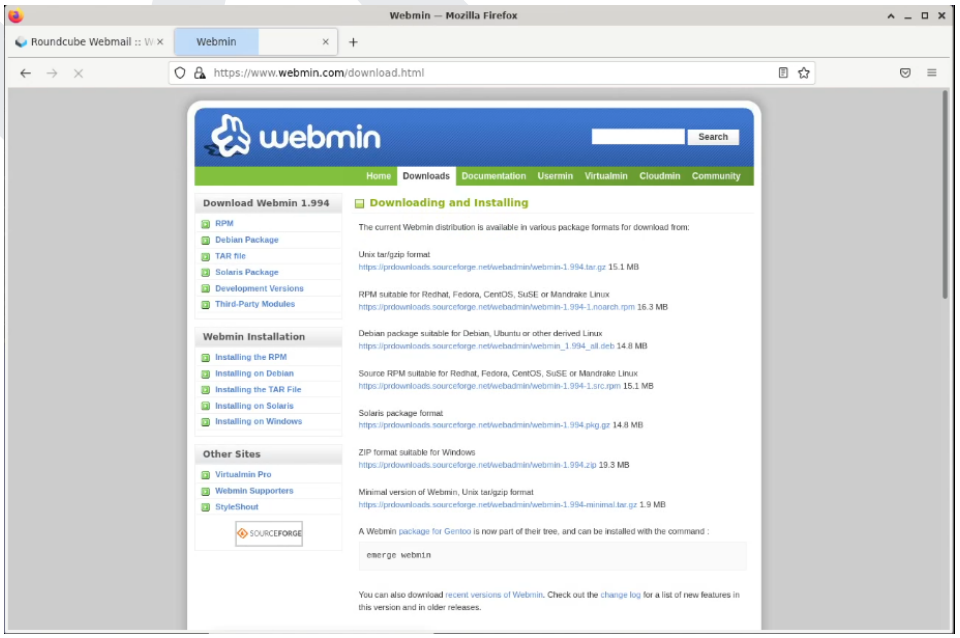


Maka akan tampil pesan baru pada **inbox** yaitu dari **user1.**

5. **Konfigurasi Webmin dengan HTTPS**
   a. Jangan lupa mengembalikan **nameserver** lama yang telah anda catat pada file **/etc/resolv.conf** agar dapat terhubung ke internet

```
 GNU nano 5.4                    /etc/resolv.conf *
#domain localdomain
#search localdomain
nameserver 192.168.159.2
#nameserver 10.252.108.103
```

   b. Buka web browser dan ketik www.webmin.com lalu download yang bertipe Debian



c. Setelah webmin terdownload buka folder **Downloads** disini saya menggunakan user login **root** jika tidak ada coba buka folder **/home/student/Downloads**. **Student** bisa diganti dengan **user yang sedang anda login kan sekarang**. Untuk menginstall paket webmin dapat menggunakan perintah apt-get install ./webmin

```
root@debian:~# cd Downloads/
root@debian:~/Downloads# ls
webmin_1.994_all.deb
root@debian:~/Downloads# apt-get install ./webmin_1.994_all.deb
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Note, selecting 'webmin' instead of './webmin_1.994_all.deb'
The following additional packages will be installed:
  libauthen-pam-perl libio-pty-perl
The following NEW packages will be installed:
  libauthen-pam-perl libio-pty-perl webmin
0 upgraded, 3 newly installed, 0 to remove and 0 not upgraded.
Need to get 64.5 kB/28.4 MB of archives.
After this operation, 303 MB of additional disk space will be used.
Do you want to continue? [Y/n]
```

d. Konfigurasi SSL untuk domain **webmin.amj-2022.ita** yaitu masuk ke direktori **/etc/apache2/sites-available/**

```
root@debian:/etc/skel# cd /etc/apache2/sites-available/
```

e. Duplikat konfigurasi **default-ssl.conf** menjadi **webmin-ssl.conf**

```
root@debian:/etc/apache2/sites-available# cp default-ssl.conf webmin-ssl.conf
```

f. Konfigurasi **webmin-ssl.conf** menggunakan **nano** pastikan anda telah berada di direktori **/etc/apache/sites-available/**

```
root@debian:/etc/apache2/sites-available# nano webmin-ssl.conf
```

Sesuaikan seperti konfigurasi dibawah ini

```
  GNU nano 5.4                          webmin-ssl.conf *
<IfModule mod_ssl.c>
        <VirtualHost _default_:443>
                ServerAdmin webmaster@amj-2022.ita
                ServerName webmin.amj-2022.ita
                ServerAlias webmin.amj-2022.ita

                SSLProxyEngine On
                SSLProxyVerify none
                SSLProxyCheckPeerCN off
                SSLProxyCheckPeerExpire off

                ProxyRequests off
                ProxyPreserveHost On

                ProxyPass / https://localhost:10000/
                ProxyPassReverse / https://localhost:10000/
                #DocumentRoot /var/www/html
```

g. Nyalakan module **ssl** dengan menggunakan perintah **a2enmod ssl**

```
root@debian:/etc/apache2/sites-available# a2enmod ssl
Considering dependency setenvif for ssl:
Module setenvif already enabled
Considering dependency mime for ssl:
Module mime already enabled
Considering dependency socache_shmcb for ssl:
Enabling module socache_shmcb.
Enabling module ssl.
See /usr/share/doc/apache2/README.Debian.gz on how to configure SSL and create s
elf-signed certificates.
To activate the new configuration, you need to run:
  systemctl restart apache2
```

h. Nyalakan module **proxy** dan **proxy_http** dengan menggunakan perintah **a2enmod proxy && a2enmod proxy_http**

```
root@debian:/etc/apache2/sites-available# a2enmod proxy
Enabling module proxy.
To activate the new configuration, you need to run:
  systemctl restart apache2
root@debian:/etc/apache2/sites-available# a2enmod proxy_http
Considering dependency proxy for proxy_http:
Module proxy already enabled
Enabling module proxy_http.
To activate the new configuration, you need to run:
  systemctl restart apache2
```

i. Nyalakan konfigurasi **mail-ssl.conf** dengan menggunakan perintah **a2ensite mail-ssl.conf** pastikan anda telah berada di direktori **/etc/apache/sites-available/**

```
root@debian:/etc/apache2/sites-available# a2ensite webmin-ssl.conf
Enabling site webmin-ssl.
To activate the new configuration, you need to run:
  systemctl reload apache2
```

j. **Restart Service Apache2** dengan perintah **systemctl restart apache2**

```
root@debian:/etc/apache2/sites-available# systemctl restart apache2
```

k. Setelah restart konfigurasi **Apache2** ganti **nameserver** terlebih dahulu pada file **/etc/resolv.conf**

```
root@debian:~# nano /etc/resolv.conf
```

e. Sebelum Konfigurasi :

```
  GNU nano 5.4                          /etc/resolv.conf
domain localdomain
search localdomain
nameserver 192.168.159.2
```

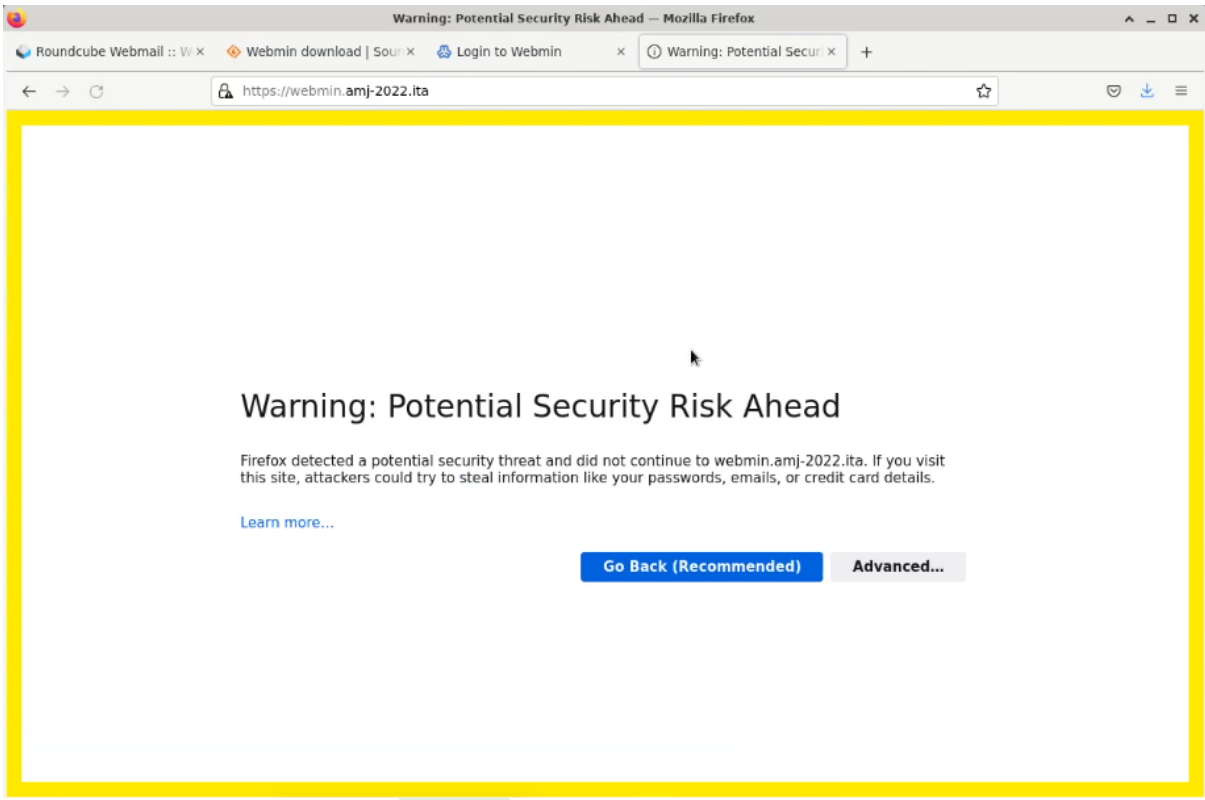
PERINGATAN : Catat **nameserver** lama terlebih dahulu agar saat **instalasi paket selanjutnya** yang membutuhkan **internet tetap dapat terhubung**

f. Sesudah Konfigurasi :

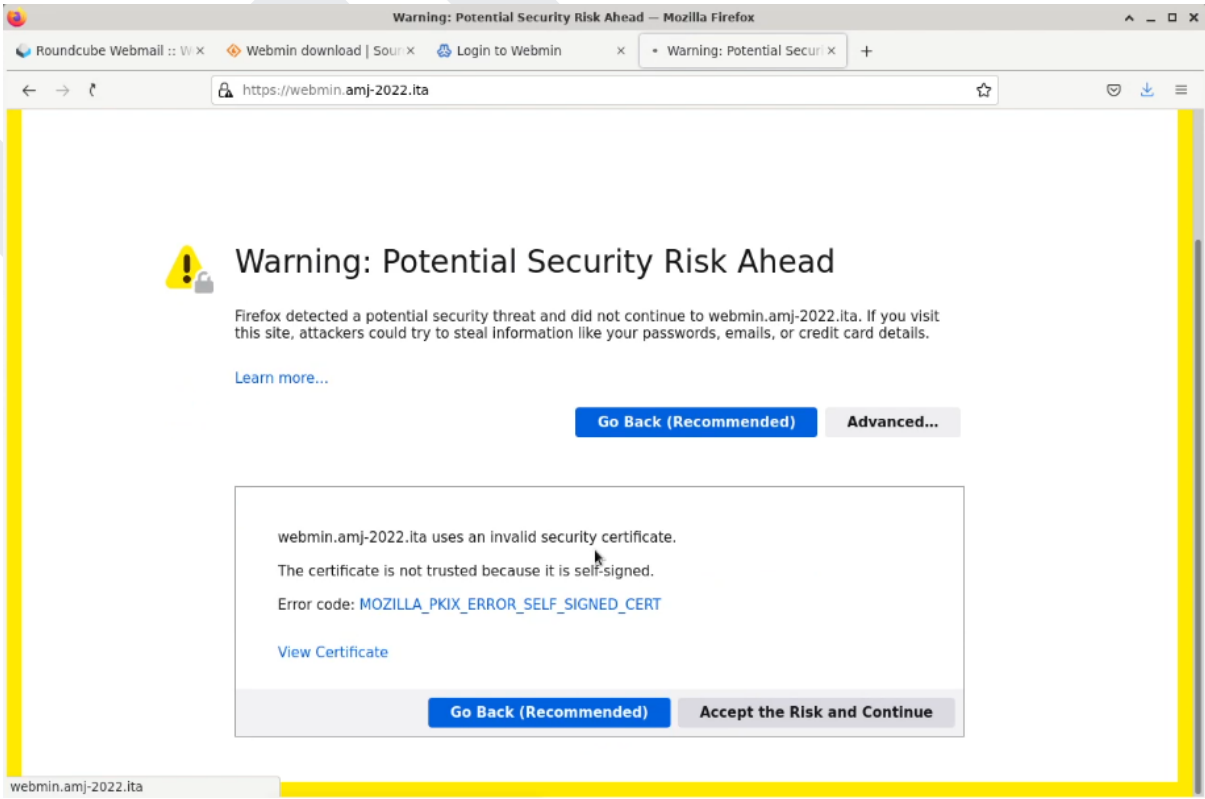
```
  GNU nano 5.4                          /etc/resolv.conf *
#domain localdomain
#search localdomain
#nameserver 192.168.159.2
nameserver 10.252.108.103
```

Sesuaikan IP yang telah dikonfigurasi pada **Record Resource**

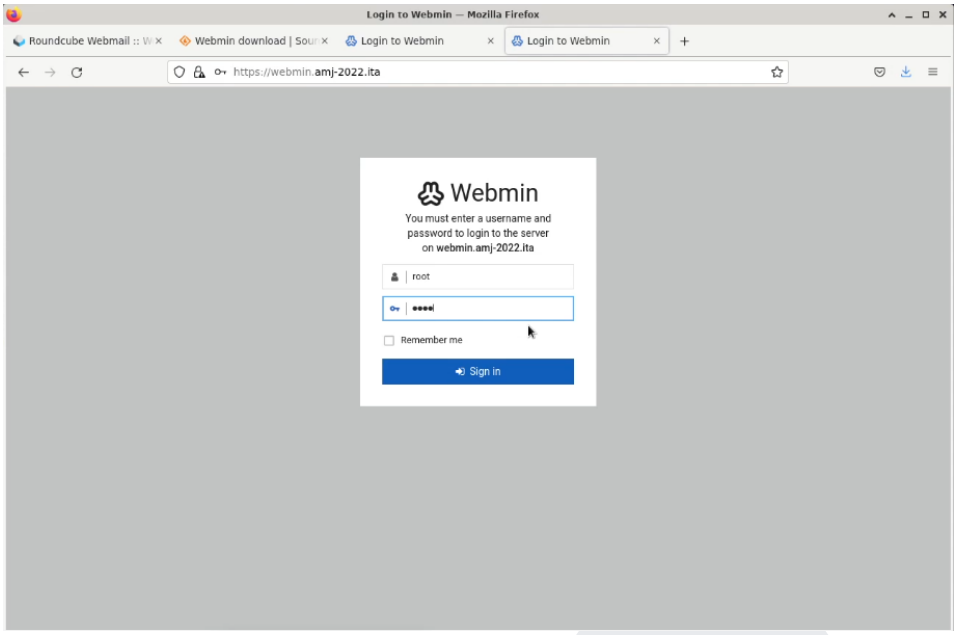
I. Setelah mengganti **nameserver** pada **/etc/resolv.conf** lakukan uji coba dengan membuka browser setelah itu mengetikkan domain dengan format **https://webmin.amj-2022.ita**



Setelah Tampil Seperti Diatas Klik **Advanced**



Setelah Tampil Seperti Diatas Klik **Accept the Risk and Continue**



Maka akan tampil seperti diatas untuk username masukkan **root** dan password masukkan **password root yang telah terinstall di debian anda**