

LAPORAN PROYEK WEB SERVER & MAIL SERVER



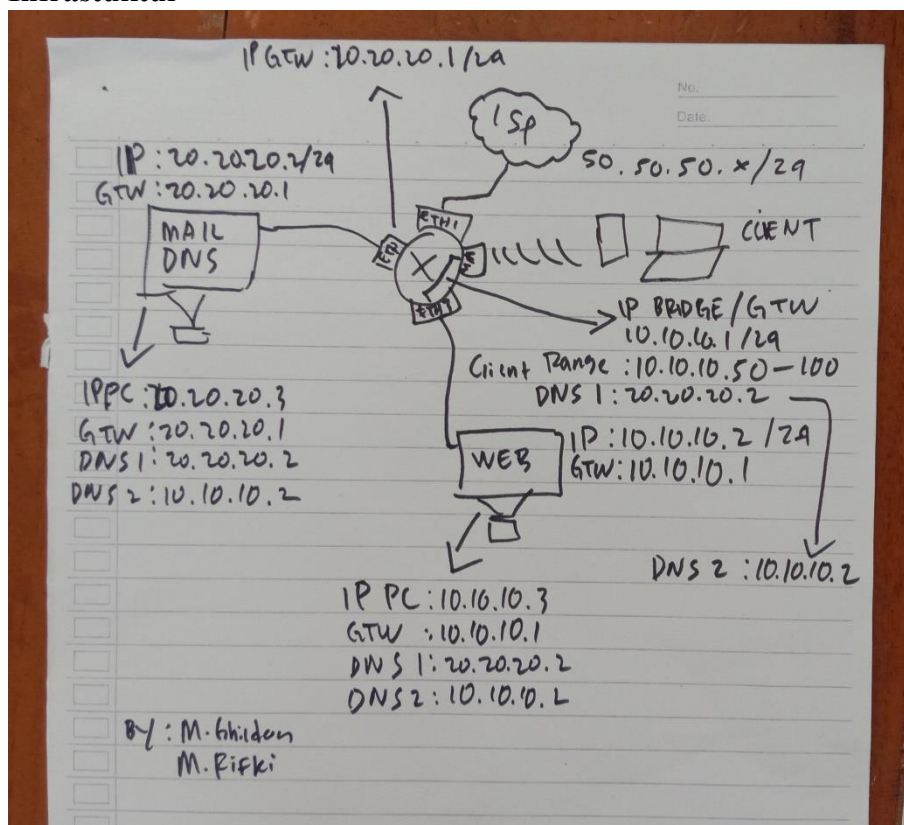
Nama anggota kelompok:

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TEKNIK KOMPUTER & JARINGAN SMK NEGERI 1 SUBANG

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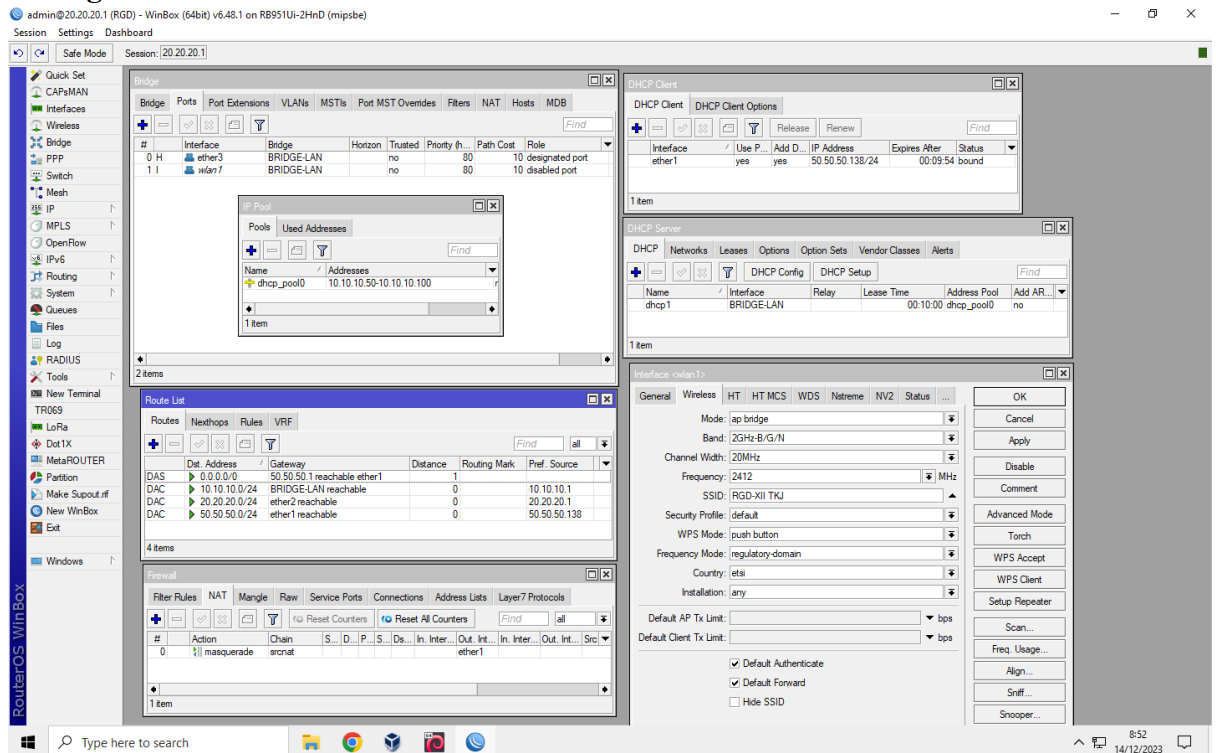
A. Infrastruktur



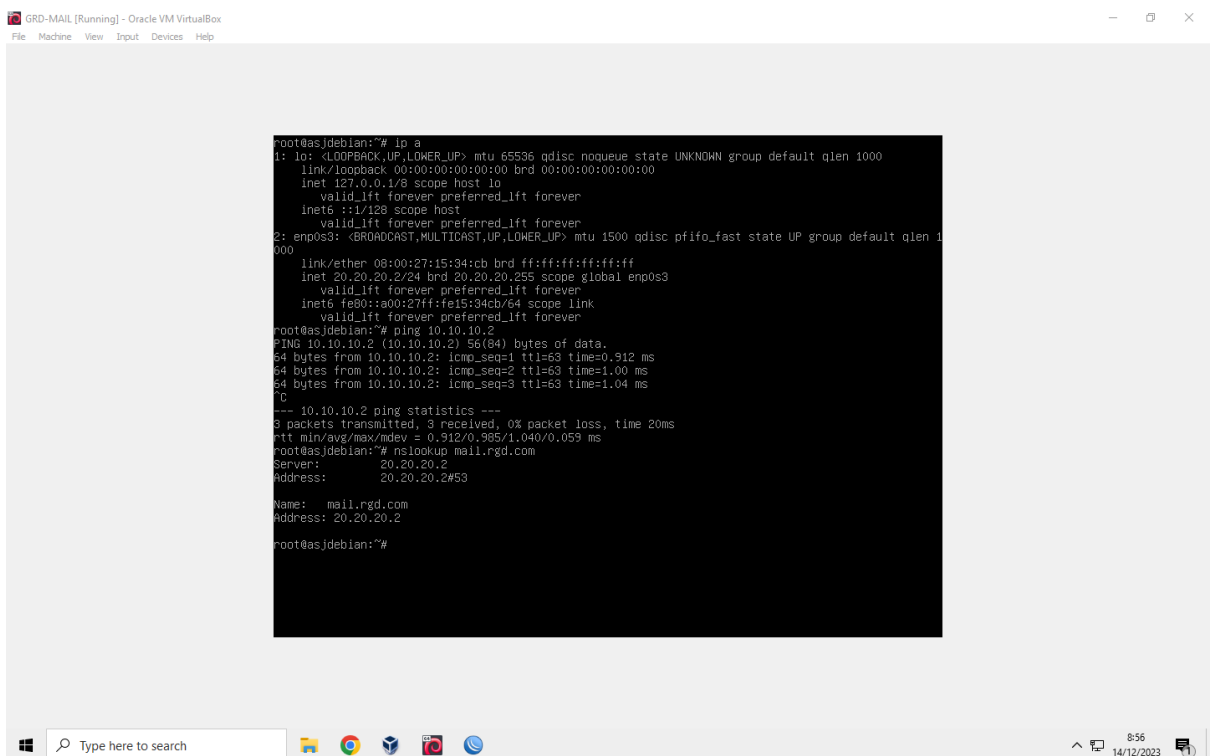
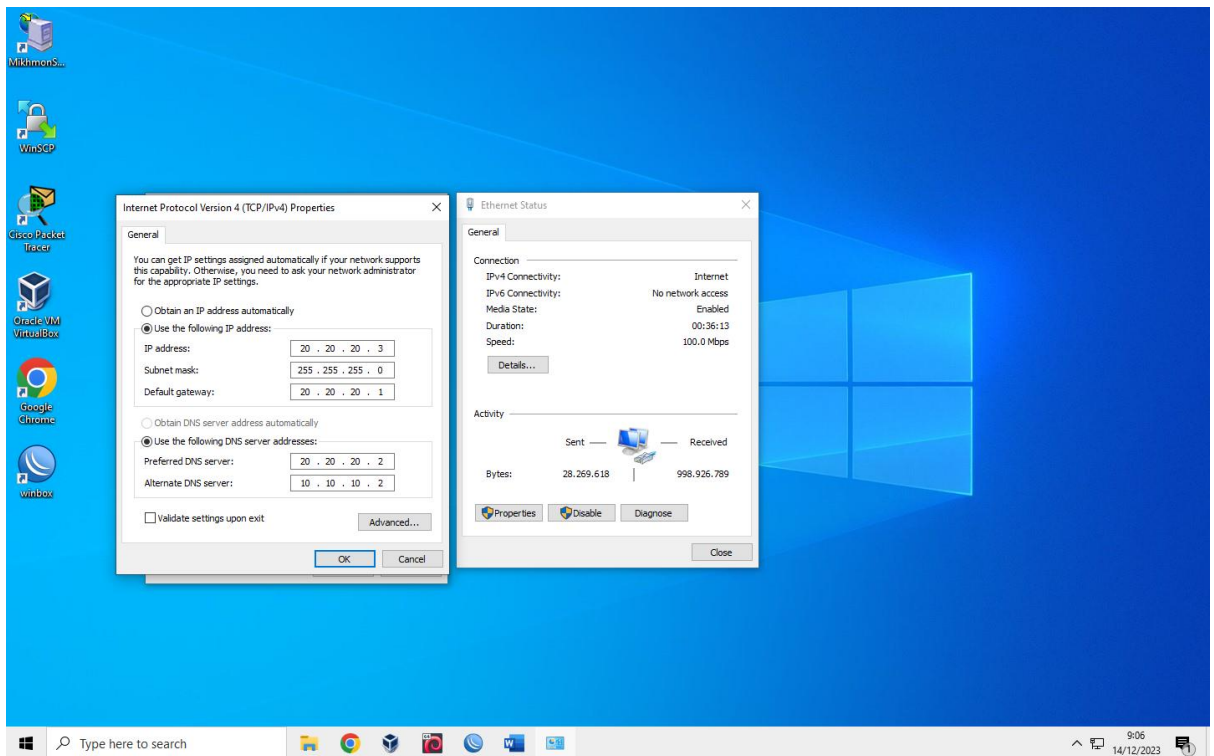
Sebelum membuat web server dan mail server, di sini kita membentuk sebuah topologi jaringan. ISP (Internet Server Provider) kita ambil dari LAB TKJ SMKN 1 SUBANG dengan alamat IP 50.50.50.x/24 DHCP lalu disambungkan ke mikrotik pada port 1/eth1. Lalu untuk menyambungkan PC dengan mikrotik, kita gunakan port 2/eth2 dengan alamat IP 20.20.20.1/24 tanpa DHCP Server maka di sini PC maupun debian server diharuskan menambahkan IP secara manual atau static dikarenakan tidak ada alokasi IP dari mikrotik, dengan ketentuan PC alamat IP 20.20.20.3/24 Gateway 20.20.20.1/24, gateway pada PC maupun Debian server dimasukkan dengan IP pada Mikrotik bukan sesuka hati kita karna bagaimanapun tidak akan konek ke gateway mikrotik jadi harus dikonfig dengan benar, kemudian untuk IP Debian mail server menggunakan IP 20.20.20.2/24 Gateway 20.20.20.1/24 yang dimana akan kita gunakan sebagai DNS server.

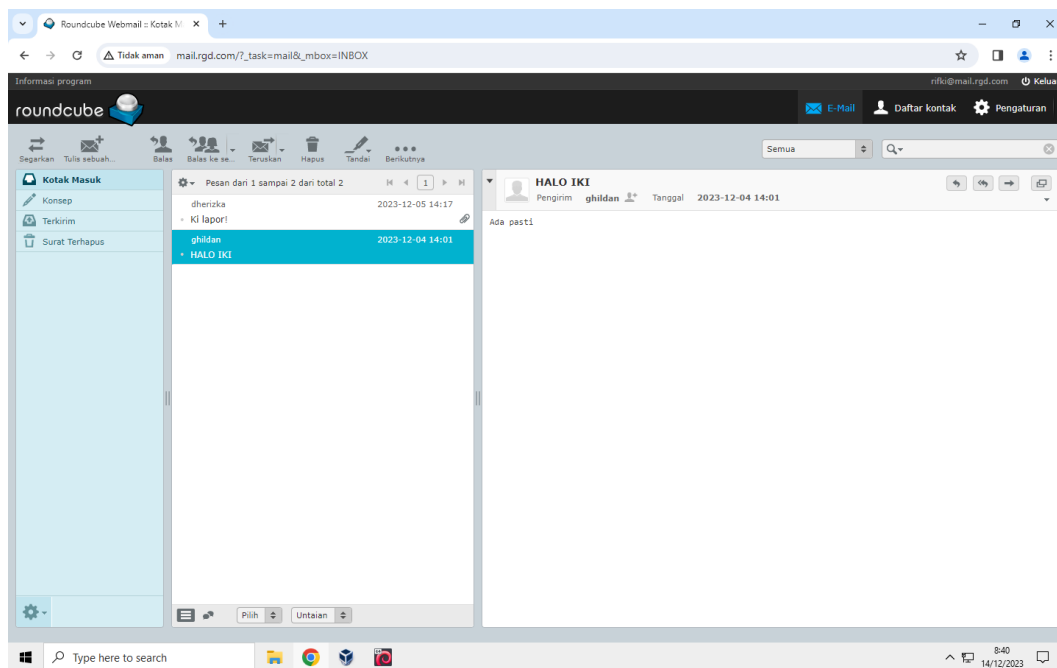
Lalu untuk web server pada PC 2 akan kami gunakan bridge dengan ketentuan port 3/eth3 dan wlan1 untuk client akan kami satu segmenkan atau alamat IP nya sama, dengan ketentuan IP bridge (port 3/eth3 dan wlan1 IP 10.10.10.1/24), lalu untuk PC 2 IP 10.10.10.3/24 Gateway 10.10.10.1/24 dan untuk Debian server 10.10.10.2/24 Gateway 10.10.10.1/24 dan IP debian server akan kami gunakan sebagai DNS server, maka DNS server ada dua yaitu 20.20.20.1 & 10.10.10.1 sementara untuk google tidak akan kami masukkan dikarenakan sudah menggunakan DNS Server dari bind9 debian. PC yang berperan sebagai web server tidak akan kebagian koneksi internet karena status nya hanya sebagai jembatan untuk terhubung ke web server virtual debian.

B. Konfigurasi & Hasil

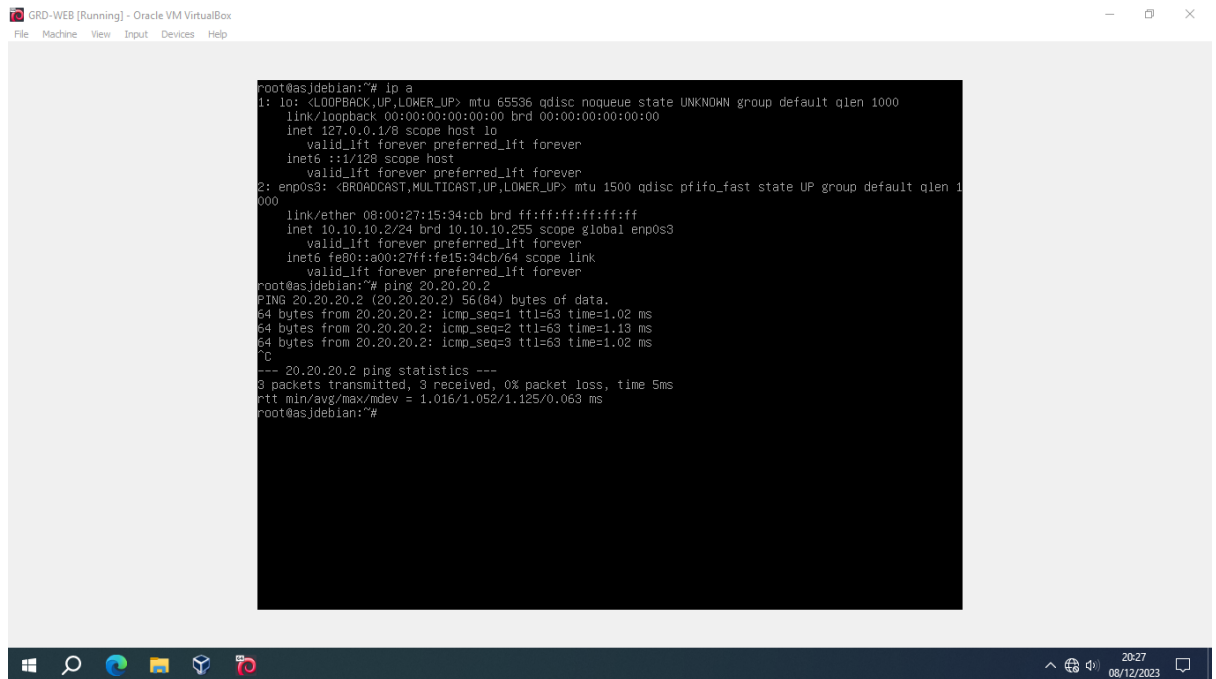


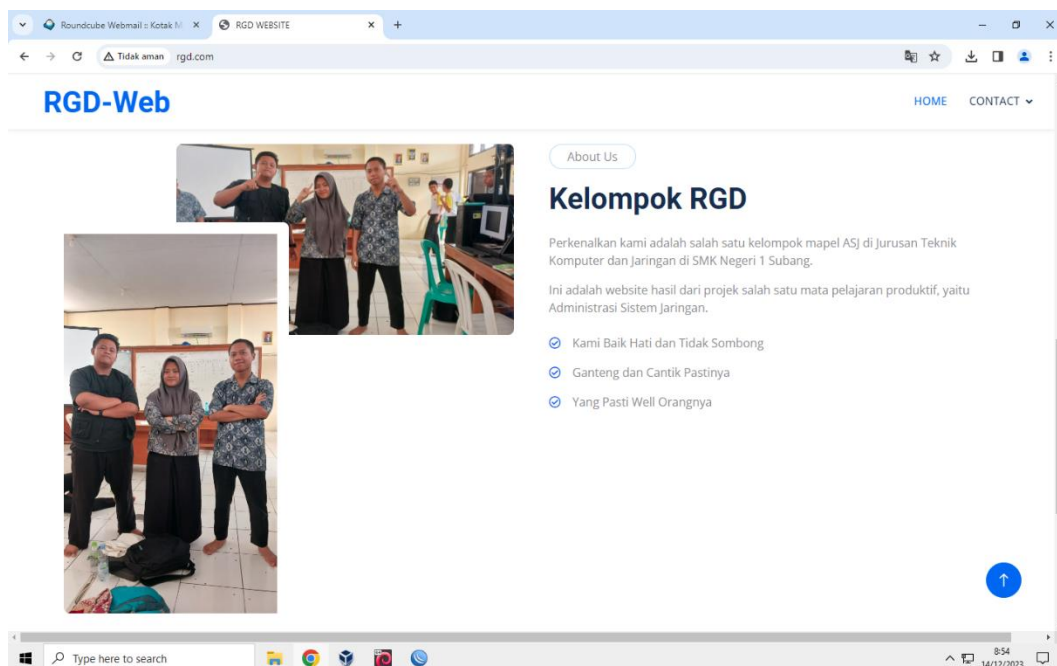
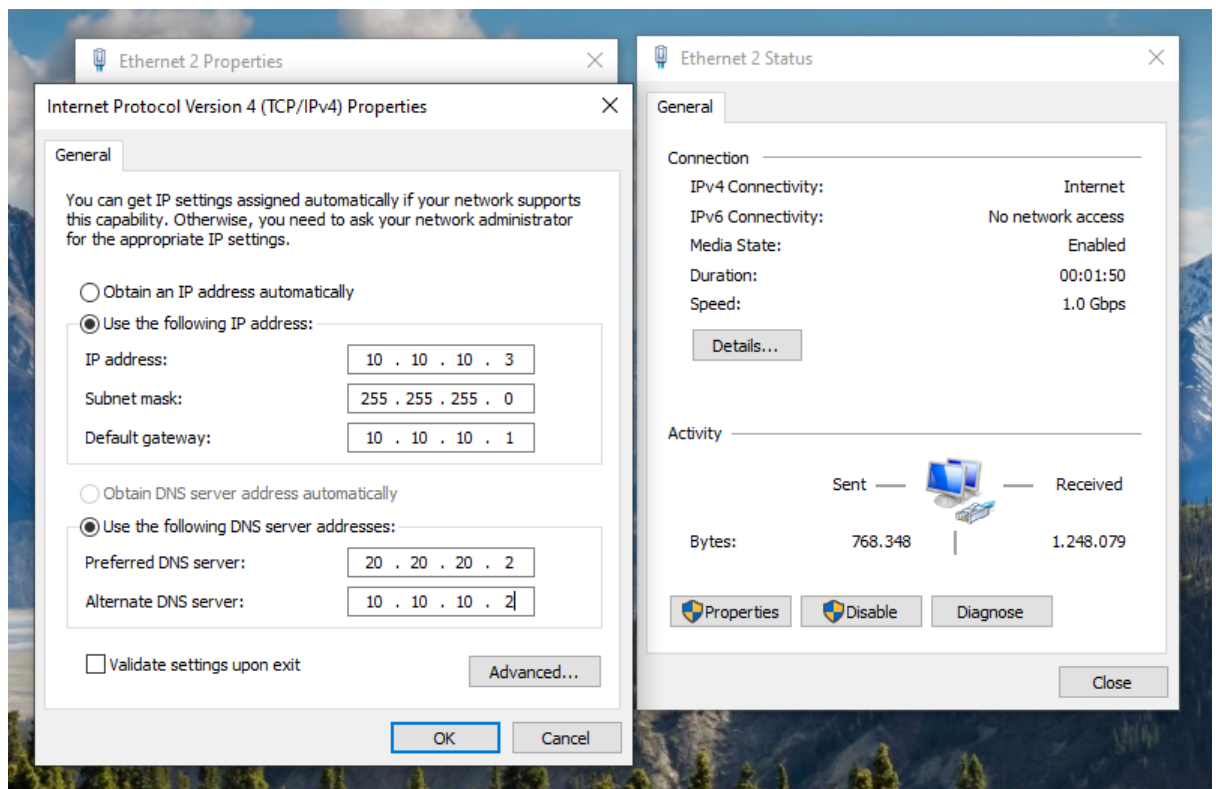
IP eth2 digunakan untuk PC 1 dan mail server dengan ketentuan IP 20.20.20.1/24 yang berperan sebagai gateway. Lalu PC 2, web server dan client kami satu segmenkan dengan menambahkannya ke Bridge maka otomatis saat menambahkan IP Bridge pada IP-Address di mikrotik akan satu segmen, kami sudah sepakati IP bridge yaitu 10.10.10.1/24 yang berperan sebagai gateway. Sebelum itu hubungkan dulu Mikrotik ke Internet, kami gunakan port 1/eth1 untuk tersambung ke ISP pada IP-DHCP client di winbox, dengan ketentuan IP 50.50.50.x/24 otomatis akan mendapatkan IP (DHCP). Lalu untuk eth 3, wlan1 yang tersambung ke PC 2 dan web server kami setting DHCP Pool atau range IP yang kita ingin gunakan yaitu dari 10.10.10.50-10.10.10.100 berarti ada 50 client yang dapat tersambung ke server. Agar IP Private kita dapat tersambung ke internet, kita gunakan fitur firewall pada winbox, caranya klik IP lalu firewall, pilih NAT lalu klik tanda + untuk Chain gunakan default yaitu srcnat lalu Out. Interface pilih ether1 karna mikrotik tersambung ke ISP melalui eth1/port 1, kemudian pada tab action pilih masquerade gunanya agar IP Private bisa terhubung ke internet dengan cara menyamarkan IP Public jadi sebenarnya kita sedang internetan dengan IP public hanya saja karna ada bantuan masquerade kita bisa menggunakan IP private yang sudah kita konfigurasi.





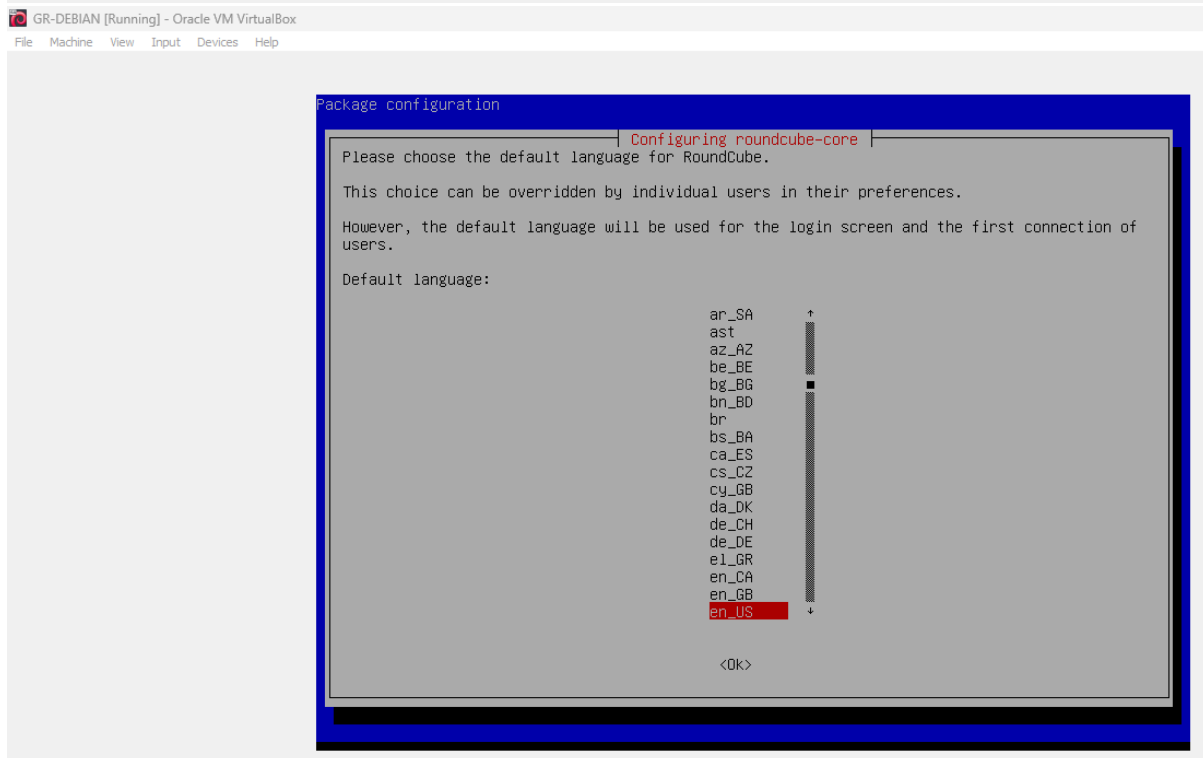
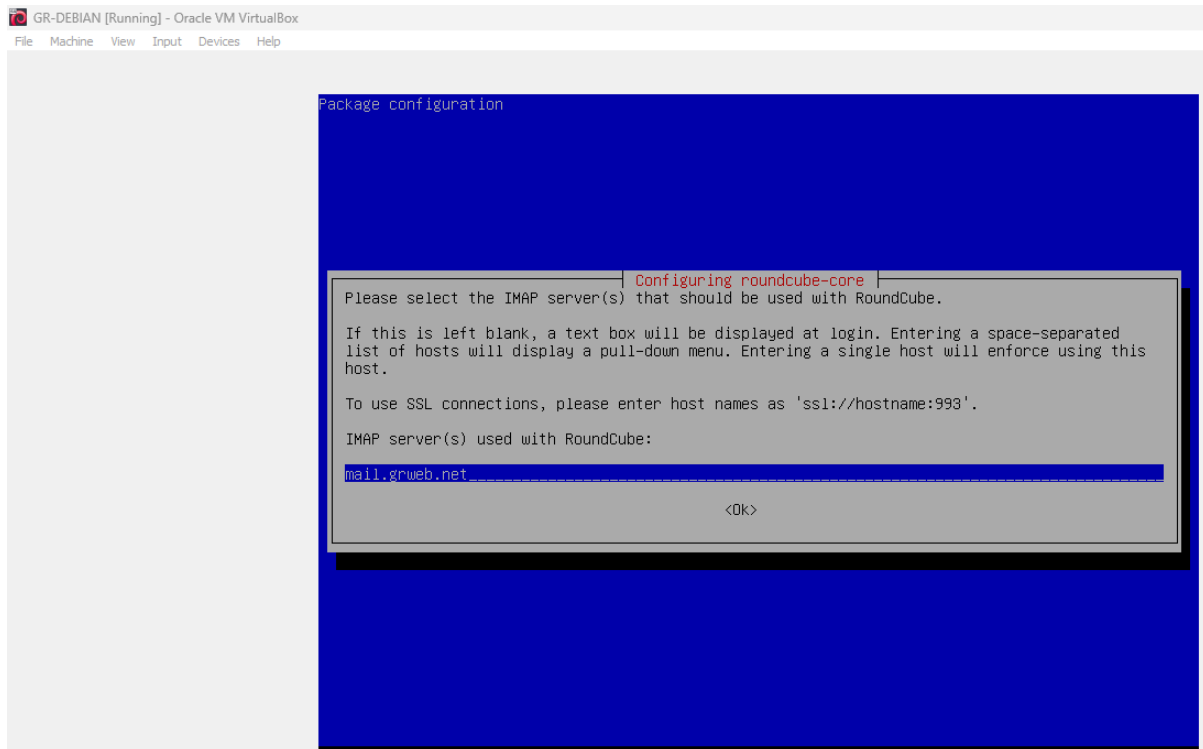
Tampilan terakhir mail server kami.





Tampilan website terakhir kami.

- Tahapan konfigurasi Roundcube Webmail



Package configuration

Configuring roundcube-core

Since you are reconfiguring roundcube, you may also want to reinstall the database which it uses.

If you wish to reinstall the database for roundcube, you should select this option. If you do not wish to do so (if you are reconfiguring the package for unrelated reasons), you should not select this option.

Warning: if you opt to reinstall the database and install it under a name that already exists, the old database will be dropped without further questions. In that case a backup of the original database is made in /var/tmp/.

Warning: if you change the name of the database, the old database will not be removed. If you change the name of the user that connects to the database, the privileges of the original user will not be revoked.

Reinstall database for roundcube?

<Yes>

<No>

Package configuration

Configuring roundcube-core

By default, roundcube will be configured to use a MySQL server through a local Unix socket (this provides the best performance). To connect with a different method, or to a different server entirely, select the appropriate option from the choices here.

Connection method for MySQL database of roundcube:

Unix socket

TCP/IP

<OK>

<Cancel>

Package configuration

Configuring roundcube-core

Please select the remote hostname to use, or select "new host" to enter a new host.

Host name of the MySQL database server for roundcube:

new host
localhost

<Ok> <Cancel>

Package configuration

Configuring roundcube-core

Please specify the port the MySQL database on the remote host is running on. To use the default port, leave this field blank.

Port number for the MySQL service:

3306

<Ok> <Cancel>

Package configuration

Configuring roundcube-core

Please provide a name for the MySQL database to be used by roundcube.

MySQL database name for roundcube:

roundcube

<Ok> <Cancel>

Package configuration

Configuring roundcube-core

Please provide a MySQL username for roundcube to register with the database server. A MySQL user is not necessarily the same as a system login, especially if the database is on a remote server.

This is the user which will own the database, tables, and other objects to be created by this installation. This user will have complete freedom to insert, change, or delete data in the database.

If your username contains an @, you need to specify the domain as well (see below).

Advanced usage: if you need to define the domain that the user will log in from, you can write "username@domain".

MySQL username for roundcube:

roundcube@localhost

<Ok> <Cancel>

Package configuration

Configuring roundcube-core

Please provide a password for roundcube to register with the database server. If left blank, a random password will be generated.

MySQL application password for roundcube:

<OK>

<Cancel>

Package configuration

Configuring roundcube-core

Please provide the name of the account with which this package should perform administrative actions. This user is the one with the power to create new database users.

For MySQL, this is almost always "root". Note that this is not the same as the Unix login "root".

Name of the database's administrative user:

root

<OK>

<Cancel>

Package configuration

Configuring roundcube-core

RoundCube supports any web server supported by PHP, however only Apache 2 and lighttpd can be configured automatically.

Please select the web server(s) that should be configured automatically for RoundCube.

Web server(s) to configure automatically:

[*] apache2

[*] lighttpd

<Ok>

<Cancel>

Package configuration

Configuring roundcube-core

In order to activate the new configuration, the reconfigured web server(s) have to be restarted.

Should the webserver(s) be restarted now?

<Yes>

<No>

```

GNU nano 3.2 /etc/roundcube/config.inc.php

// SMTP port (default is 25; use 587 for STARTTLS or 465 for the
// deprecated SSL over SMTP (aka SMTPS))
$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'] = '';

// Name your service. This is displayed on the login screen and in the window title
$config['product_name'] = 'GRWEB Webmail';

// this key is used to encrypt the users imap password which is stored
// in the session record (and the client cookie if remember password is enabled).
// please provide a string of exactly 24 chars.
// YOUR KEY MUST BE DIFFERENT THAN THE SAMPLE VALUE FOR SECURITY REASONS
$config['des_key'] = '1h19PCy0ZenTsyei8eeXe2Xq';

// List of active plugins (in plugins/ directory)
// Debian: install roundcube-plugins first to have any
$config['plugins'] = array(
);

// skin name: folder from skins/
$config['skin'] = 'larry';

G Get Help  W Write Out  K Where Is  K Cut Text  J Justify  C Cur Pos  M-U Undo
X Exit      R Read File  \ Replace  U Uncut Text  T To Spell  _ Go To Line  M-E Redo

```

```

root@asjdebian:~# mysql -u root
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 72
Server version: 10.3.15-MariaDB-1 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)]> use mysql;
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
MariaDB [mysql]> show databases;
+-----+
| Database |
+-----+
| information_schema |
| mysql |
| performance_schema |
| roundcube |
+-----+
4 rows in set (0.001 sec)

MariaDB [mysql]>

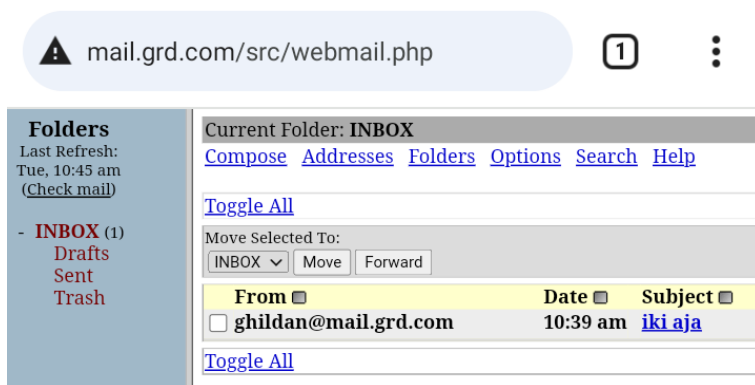
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GR-DEBIAN [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help

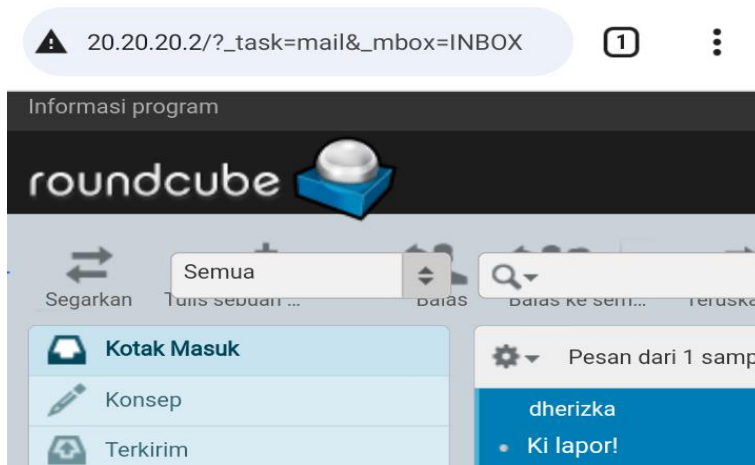
root@asjdebian:~# telnet mail.grweb.net 25
Trying 10.10.10.1...
Connected to mail.grweb.net.
Escape character is '^['.
220 asjdebian.debian.org ESMTP Postfix (Debian/GNU)
KONEKSI SMTP_

GR-DEBIAN [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help

root@asjdebian:~# telnet mail.grweb.net 110
Trying 10.10.10.1...
Connected to mail.grweb.net.
Escape character is '^['.
+OK Dovecot (Debian) ready.
MAIL PROTOKOL POP3_
```



Ini sebelumnya kita menggunakan Squirrelmail dan pengujian di client berhasil



Namun saat pindah ke Roundcube, client hanya bisa mengakses menggunakan alamat IP saja dan kami belum menemukan solusi dari masalah ini.

Sekian & terima kasih.