

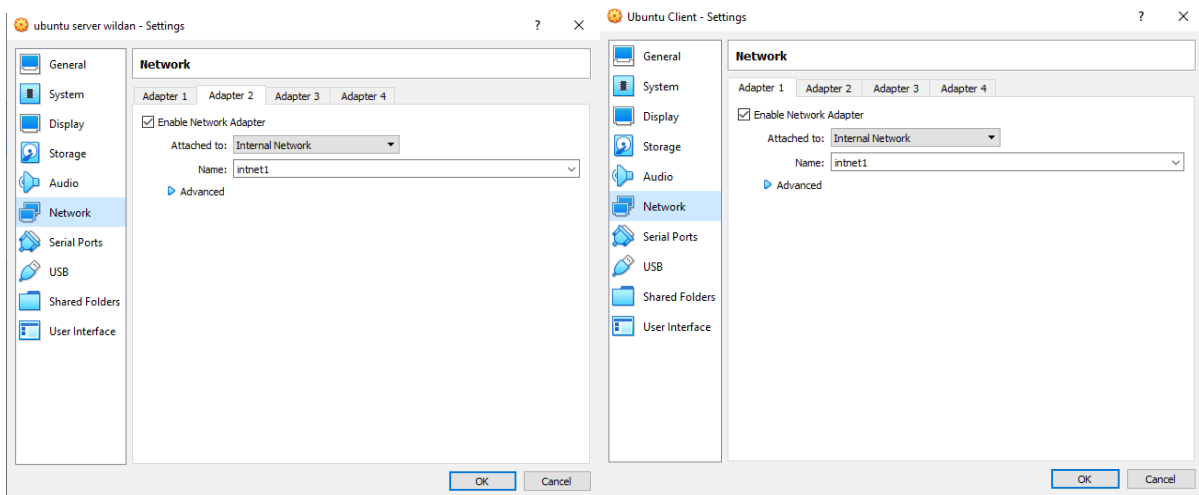
dokumentasi tentang instalasi Proxy Server

Nama: Wildan Aburrasyid

Kelas: 11 TKJ 2

Server proksi atau server pewali adalah sebuah perantara yang bertindak sebagai perantara permintaan dari klien mencari sumber daya dari server lain. Klien A terhubung ke server perantara, meminta beberapa layanan, seperti berkas, sambungan, laman, atau sumber daya lainnya, yang tersedia dari server yang berbeda.

1. Setting network Ubuntu server dan Ubuntu client di virtual box seperti pada gambar berikut. (Virtualbox>VirtualMachine>Setting>Network)



2. Buka Ubuntu server-nya dan login.
3. Masuk ke root dengan cara ketikkan perintah.

“sudo su” dan masukkan password

```
ubuntu server wildan [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
ubuntu@wildan login: wildan
Password:
Last login: Tue Mar 16 13:43:48 WIB 2021 on tty1
Welcome to Ubuntu 16.04.7 LTS (GNU/Linux 4.4.0-186-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

 * Introducing self-healing high availability clusters in MicroK8s.
   Simple, hardened, Kubernetes for production, from RaspberryPi to DC.
   https://microk8s.io/high-availability

95 packages can be updated.
72 updates are security updates.

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

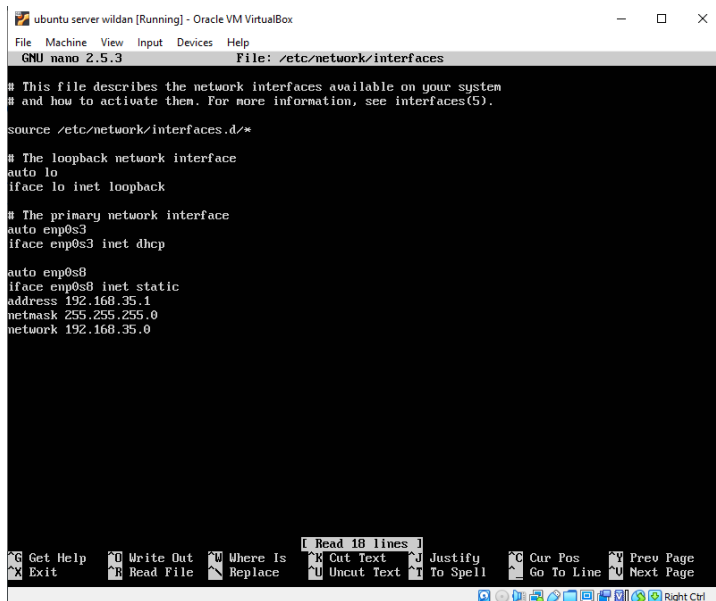
Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

wildan@ubuntu@wildan:~$ sudo su
[sudo] password for wildan:
root@ubuntu@wildan:~#
```

4. Masuk ke network interface dengan cara ketikkan perintah.

Sudo nano /etc/network/interfaces

5. Setting network interface seperti gambar berikut.



```
ubuntu server wildan [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
GNU nano 2.5.3 File: /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

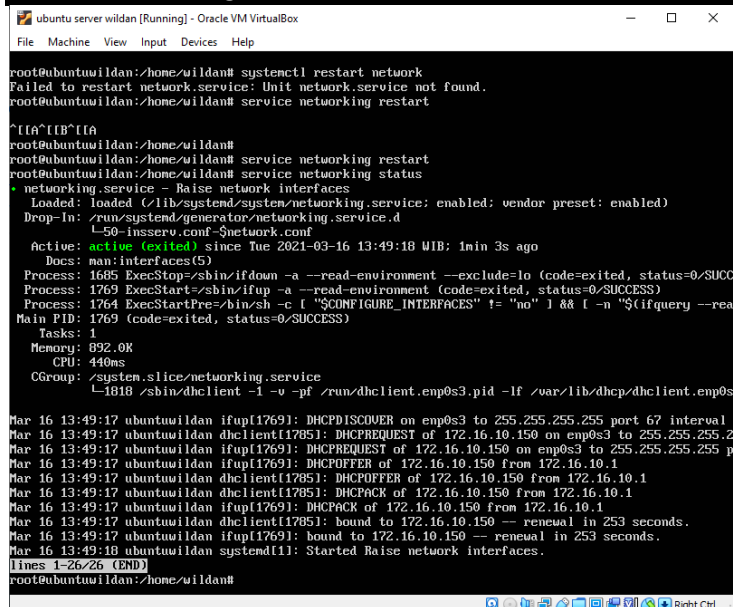
# The primary network interface
auto enp0s3
iface enp0s3 inet dhcp

auto enp0s8
iface enp0s8 inet static
address 192.168.35.1
netmask 255.255.255.0
network 192.168.35.0
```

6. Ketik-kn perintah untuk melihat status network interface.

Service networking restart

Service networking status



```
ubuntu server wildan [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help

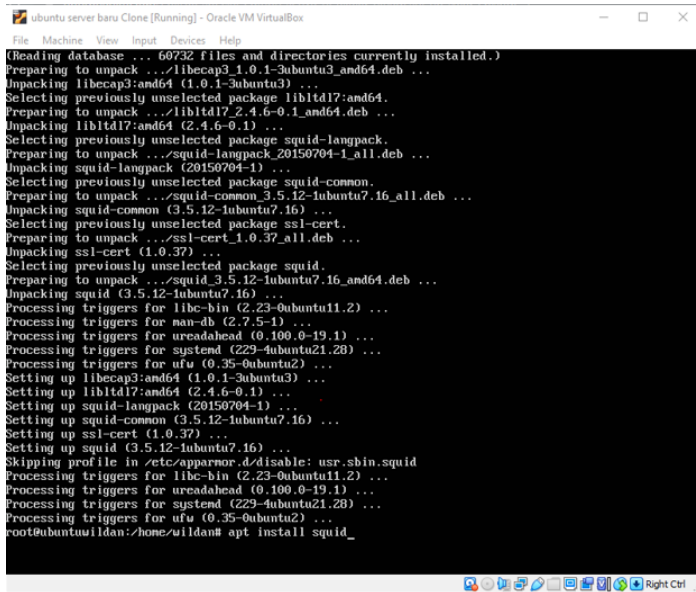
root@ubuntuwildan:/home/wildan# systemctl restart network
Failed to restart network.service: Unit network.service not found.
root@ubuntuwildan:/home/wildan# service networking restart

^[[A^[[B^[[IA
root@ubuntuwildan:/home/wildan#
root@ubuntuwildan:/home/wildan# service networking restart
root@ubuntuwildan:/home/wildan# service networking status
+ networking.service - Raise network interfaces
  Loaded: loaded (/lib/systemd/system/networking.service; enabled; vendor preset: enabled)
  Drop-In: /run/systemd/generator/networking.service.d
           └─50-insserv.conf-$network.conf
  Active: active (exited) since Tue 2021-03-16 13:49:18 WIB; 1min 3s ago
  Docs: man:interfaces(5)
  Process: 1685 ExecStop=/sbin/ifdown -a --read-environment --exclude=lo (code=exited, status=0/SUCCESS)
  Process: 1769 ExecStart=/sbin/ifup -a --read-environment (code=exited, status=0/SUCCESS)
  Process: 1764 ExecStartPre=/bin/sh -c [ "$CONFIGURE_INTERFACES" != "no" ] && [ -n "$(ifquery --rea
Main PID: 1769 (code=exited, status=0/SUCCESS)
  Tasks: 4
  Memory: 892.0K
  CPU: 440ms
  CGroup: /system.slice/networking.service
           └─1818 /sbin/dhclient -1 -v -pf /run/dhclient.enp0s3.pid -lf /var/lib/dhcp/dhclient.enp0s

Mar 16 13:49:17 ubuntuwildan ifup[1769]: DHCPDISCOVER on enp0s3 to 255.255.255.255 port 67 interval
Mar 16 13:49:17 ubuntuwildan dhclient[1785]: DHCPREQUEST of 172.16.10.150 on enp0s3 to 255.255.255.2
Mar 16 13:49:17 ubuntuwildan ifup[1769]: DHCPREQUEST of 172.16.10.150 on enp0s3 to 255.255.255.2
Mar 16 13:49:17 ubuntuwildan ifup[1769]: DHCPOFFER of 172.16.10.150 from 172.16.10.1
Mar 16 13:49:17 ubuntuwildan dhclient[1785]: DHCPOFFER of 172.16.10.150 from 172.16.10.1
Mar 16 13:49:17 ubuntuwildan dhclient[1785]: DHCPACK of 172.16.10.150 from 172.16.10.1
Mar 16 13:49:17 ubuntuwildan ifup[1769]: DHCPACK of 172.16.10.150 from 172.16.10.1
Mar 16 13:49:17 ubuntuwildan dhclient[1785]: bound to 172.16.10.150 -- renewal in 253 seconds.
Mar 16 13:49:17 ubuntuwildan ifup[1769]: bound to 172.16.10.150 -- renewal in 253 seconds.
Mar 16 13:49:18 ubuntuwildan systemd[1]: Started Raise network interfaces.
lines 1-26/26 (END)
root@ubuntuwildan:/home/wildan#
```

7. Install proxy server dengan mengetikkan perintah.

Sudo apt install squid

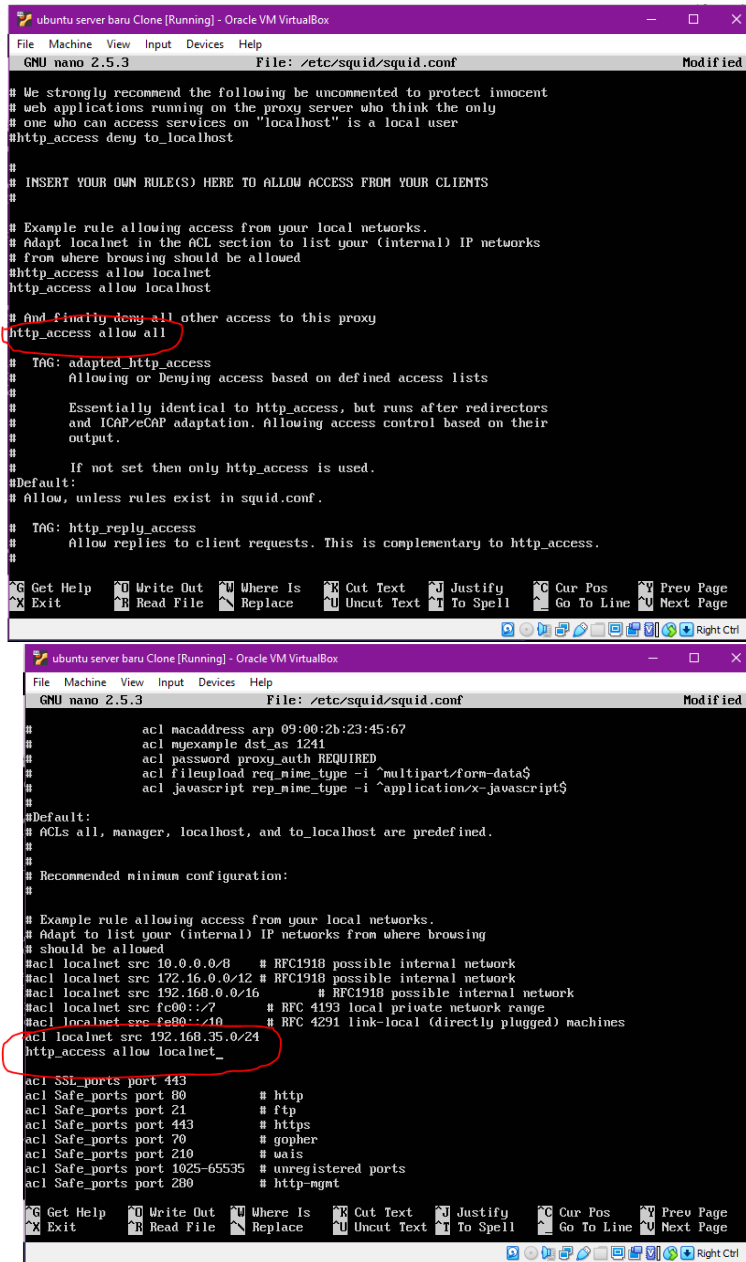


```
ubuntu server baru Clone [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
(Reading database ... 60732 files and directories currently installed.)
Preparing to unpack .../libcap3:amd64 (1.0.1-3ubuntu3) ...
Unpacking libcap3:amd64 (1.0.1-3ubuntu3) ...
Selecting previously unselected package libltdl7:amd64.
Preparing to unpack .../libltdl7:amd64 (2.4.6-0.1) ...
Unpacking libltdl7:amd64 (2.4.6-0.1) ...
Selecting previously unselected package squid-langpack.
Preparing to unpack .../squid-langpack_20150704-1_all.deb ...
Unpacking squid-langpack (20150704-1) ...
Selecting previously unselected package squid-common.
Preparing to unpack .../squid-common_3.5.12-1ubuntu7.16_all.deb ...
Unpacking squid-common (3.5.12-1ubuntu7.16) ...
Selecting previously unselected package ssl-cert.
Preparing to unpack .../ssl-cert_1.0.37_all.deb ...
Unpacking ssl-cert (1.0.37) ...
Selecting previously unselected package squid.
Preparing to unpack .../squid_3.5.12-1ubuntu7.16_and64.deb ...
Unpacking squid (3.5.12-1ubuntu7.16) ...
Processing triggers for libc-bin (2.23-0ubuntu11.2) ...
Processing triggers for man-db (2.7.5-1) ...
Processing triggers for ureadahead (0.100.0-19.1) ...
Processing triggers for systemd (229-4ubuntu21.28) ...
Processing triggers for ufw (0.35-0ubuntu2) ...
Setting up libcap3:amd64 (1.0.1-3ubuntu3) ...
Setting up libltdl7:amd64 (2.4.6-0.1) ...
Setting up squid-langpack (20150704-1) ...
Setting up squid-common (3.5.12-1ubuntu7.16) ...
Setting up ssl-cert (1.0.37) ...
Setting up squid (3.5.12-1ubuntu7.16) ...
Skipping profile in /etc/apparmor.d/disable: usr.sbin.squid
Processing triggers for libc-bin (2.23-0ubuntu11.2) ...
Processing triggers for ureadahead (0.100.0-19.1) ...
Processing triggers for systemd (229-4ubuntu21.28) ...
Processing triggers for ufw (0.35-0ubuntu2) ...
root@ubuntu:~# apt install squid_
```

8. Masuk ke settingan squid dengan cara ketikkan perintah.

Sudo nano /etc/squid/squid.conf

9. Setting squid seperti gambar berikut.



```
ubuntu server baru Clone [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
GNU nano 2.5.3 File: /etc/squid/squid.conf Modified

# We strongly recommend the following be uncommented to protect innocent
# web applications running on the proxy server who think the only
# one who can access services on "localhost" is a local user
#http_access deny to_localhost

#
# INSERT YOUR OWN RULE(S) HERE TO ALLOW ACCESS FROM YOUR CLIENTS
#
# Example rule allowing access from your local networks.
# Adapt localnet in the ACL section to list your (internal) IP networks
# from where browsing should be allowed
#http_access allow localnet
#http_access allow localhost

# And finally deny all other access to this proxy
http_access allow all

# TAG: adapted_http_access
# Allowing or Denying access based on defined access lists
#
# Essentially identical to http_access, but runs after redirectors
# and ICAp/eCap adaptation. Allowing access control based on their
# output.
#
# If not set then only http_access is used.
#Default:
# Allow, unless rules exist in squid.conf.
#
# TAG: http_reply_access
# Allow replies to client requests. This is complementary to http_access.
#
#
# Get Help Write Out Where Is Cut Text Justify Cur Pos Prev Page
# Exit Read File Replace Uncut Text To Spell Go To Line Next Page

#
# acl macaddress arp 09:00:2b:23:45:67
#
# acl myexample dst_as 1241
# acl password proxy_auth REQUIRED
# acl fileupload req_mime_type -i ^multipart/form-data$
# acl javascript rep_mime_type -i ^application/x-javascript$
#
#Default:
# ACLs all, manager, localhost, and to_localhost are predefined.
#
# Recommended minimum configuration:
#
# Example rule allowing access from your local networks.
# Adapt to list your (internal) IP networks from where browsing
# should be allowed
#acl localnet src 10.0.0.0/8 # RFC1918 possible internal network
#acl localnet src 172.16.0.0/12 # RFC1918 possible internal network
#acl localnet src 192.168.0.0/16 # RFC1918 possible internal network
#acl localnet src fc00::/7 # RFC 4193 local private network range
#acl localnet src fe80::/10 # RFC 4291 link-local (directly plugged) machines
#acl localnet src 192.168.35.0/24
http_access allow localnet_

acl SSL_ports port 443
acl Safe_ports port 80 # http
acl Safe_ports port 21 # ftp
acl Safe_ports port 443 # https
acl Safe_ports port 70 # gopher
acl Safe_ports port 210 # wais
acl Safe_ports port 1025-65535 # unregistered ports
acl Safe_ports port 280 # http-mgmt
```

10. Ketik-kn perintah untuk melihat status squid server.

Service squid restart

Service squid status

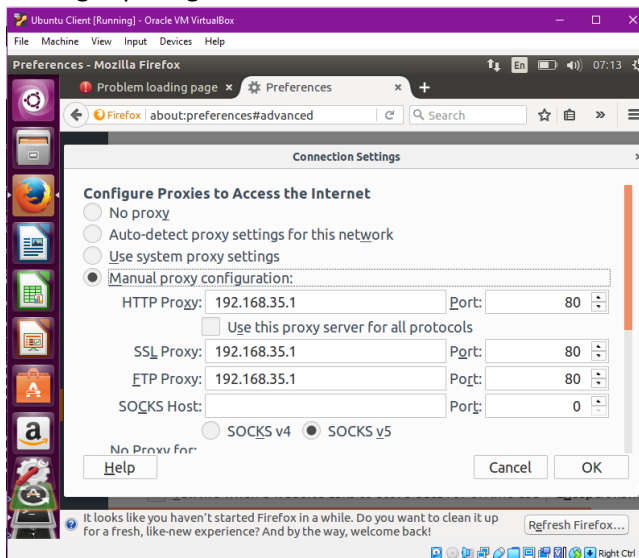
```
ubuntu server baru Clone (Running) - Oracle VM VirtualBox
File Machine View Input Devices Help
http_access allow localhost

acl SSL_ports port 443
acl Safe_ports port 80      # http
acl Safe_ports port 21      # ftp
acl Safe_ports port 443     # https
acl Safe_ports port 70      # gopher
acl Safe_ports port 210     # wais
acl Safe_ports port 1025-65535 # unregistered ports
acl Safe_ports port 280     # http-agent

root@ubuntuwilldan:/home/willdan# service squid restart
root@ubuntuwilldan:/home/willdan# service squid status
* squid.service - LSB: Squid HTTP Proxy version 3.x
   Loaded: loaded (/etc/init.d/squid; bad; vendor preset: enabled)
   Active: active (running) since Sun 2021-06-27 21:09:37 WIB; 20s ago
     Docs: man:systemd-sysv-generator(8)
  Process: 2579 ExecStop=/etc/init.d/squid stop (code=exited, status=0/SUCCESS)
  Process: 2610 ExecStart=/etc/init.d/squid start (code=exited, status=0/SUCCESS)
    Tasks: 4
   Memory: 19.2M
      CPU: 310ms
   CGroup: /system.slice/squid.service
           └─2650 /usr/sbin/squid -YC -f /etc/squid/squid.conf
             └─2652 (squid-l) -YC -f /etc/squid/squid.conf
               └─2653 (logfile-daemon) /var/log/squid/access.log
                 └─2654 (pinger)

Jun 27 21:09:37 ubuntuwilldan systemd[1]: Stopped LSB: Squid HTTP Proxy version 3.x.
Jun 27 21:09:37 ubuntuwilldan systemd[1]: Starting LSB: Squid HTTP Proxy version 3.x...
Jun 27 21:09:37 ubuntuwilldan squid[2610]: * Starting Squid HTTP Proxy squid
Jun 27 21:09:37 ubuntuwilldan squid[2610]: ...done.
Jun 27 21:09:37 ubuntuwilldan systemd[1]: Started LSB: Squid HTTP Proxy version 3.x.
Jun 27 21:09:37 ubuntuwilldan squid[2650]: Squid Parent: will start 1 kids
Jun 27 21:09:37 ubuntuwilldan squid[2650]: Squid Parent: (squid-l) process 2652 started
root@ubuntuwilldan:/home/willdan#
```

11. Buka Ubuntu client.
12. Masuk ke firefox>preferences>advanced>network>setting
13. Setting seperti gambar di bawah



14. Ketik perintah di Ubuntu client untuk mengecek hasil dari dhcp server.

```
Ping google.com
Ping 192.168.1.16
```

