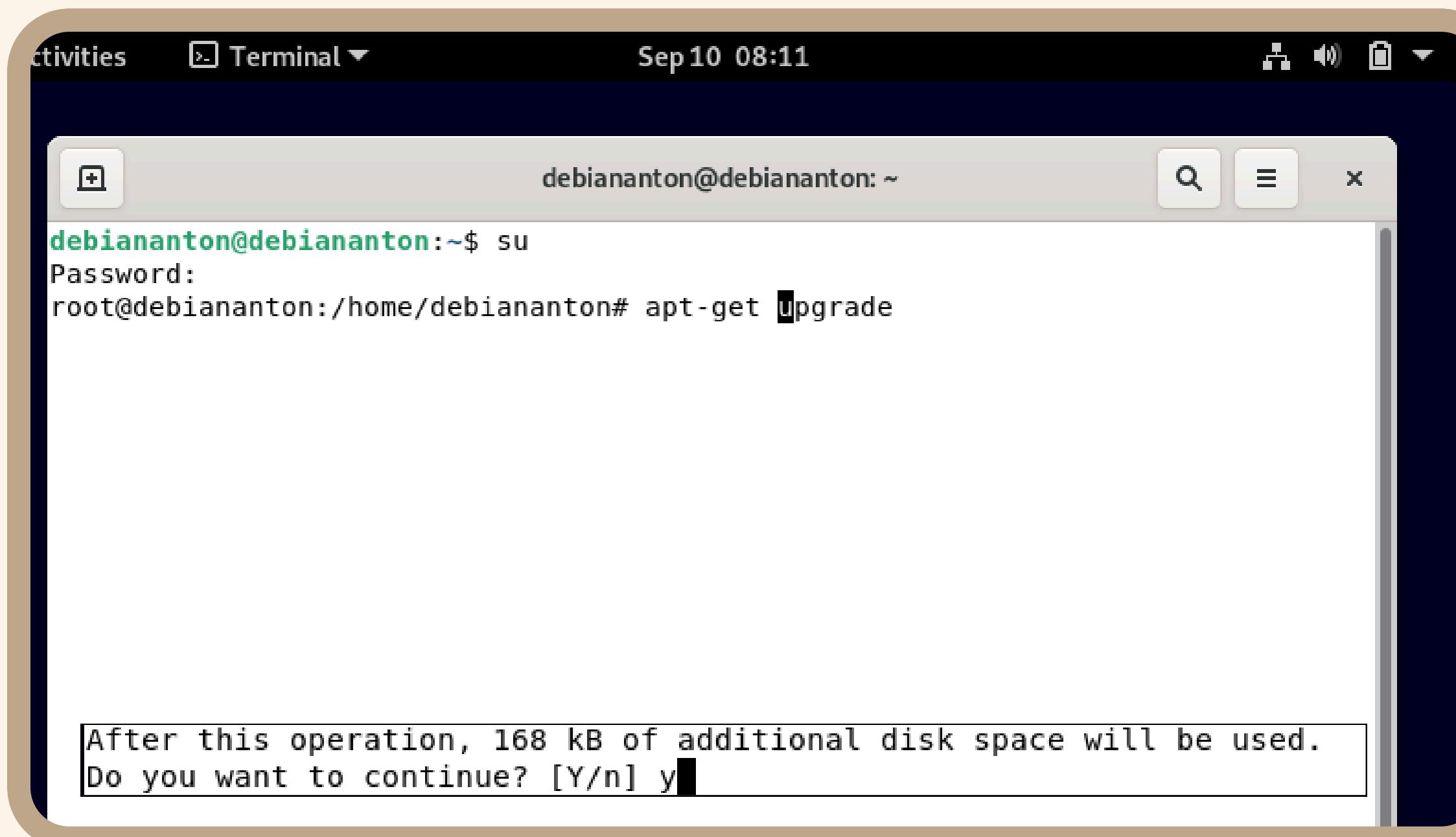


# Konfigurasi DHCP Server

By : Jonathan Antonio/XI TKJ 2

## MASUKKAN PERINTAH APT-GET UPGRADE

SILAHKAN LOGIN TERLEBIH DAHULU. KEMUDIAN MASUKKAN PERINTAH "APT-GET UPGRADE." JIKA MUNCUL PERTANYAAN "DO YOU WANT TO CONTINUE?" KETIK "Y"



The screenshot shows a Linux terminal window titled "Terminal". The terminal output is as follows:

```
Activities Terminal Sep 10 08:11
debiananton@debiananton: ~
debiananton@debiananton:~$ su
Password:
root@debiananton:/home/debiananton# apt-get upgrade
After this operation, 168 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
```

The terminal window has a dark blue header bar with the title "Terminal" and the date "Sep 10 08:11". The main area of the terminal shows the command "apt-get upgrade" being run by the root user. A message at the bottom asks if the user wants to continue, with the letter "y" highlighted in a black box.

1

**SETELAH  
SELESAI  
UPGRADE.  
MASUKKAN  
PERINTAH  
APT-GET  
UPDATE**

## MASUKKAN PERINTAH APT-GET UPDATE

```
Setting up libreoffice-base-core (1:7.0.4-4+deb11u10) ...
Setting up libreoffice-help-en-us (1:7.0.4-4+deb11u10)
Setting up python3-uno (1:7.0.4-4+deb11u10) ...
Setting up libreoffice-calc (1:7.0.4-4+deb11u10) ...
Setting up libreoffice-writer (1:7.0.4-4+deb11u10) ...
Processing triggers for hicolor-icon-theme (0.17-2) ...
Processing triggers for gnome-menus (3.36.0-1) ...
Processing triggers for libc-bin (2.31-13+deb11u10) ...
Processing triggers for man-db (2.9.4-2) ...
Processing triggers for cracklib-runtime (2.9.6-3.4) ...
Processing triggers for shared-mime-info (2.0-1) ...
Processing triggers for mailcap (3.69) ...
Processing triggers for fontconfig (2.13.1-4.2) ...
Processing triggers for desktop-file-utils (0.26-1) ...
Processing triggers for initramfs-tools (0.140) ...
update-initramfs: Generating /boot/initrd.img-5.10.0-31
root@debiananton:/home/debiananton# apt-get update
```

2

## MASUKKAN PERINTAH APT INSTALL ISC-DHCP-SERVER

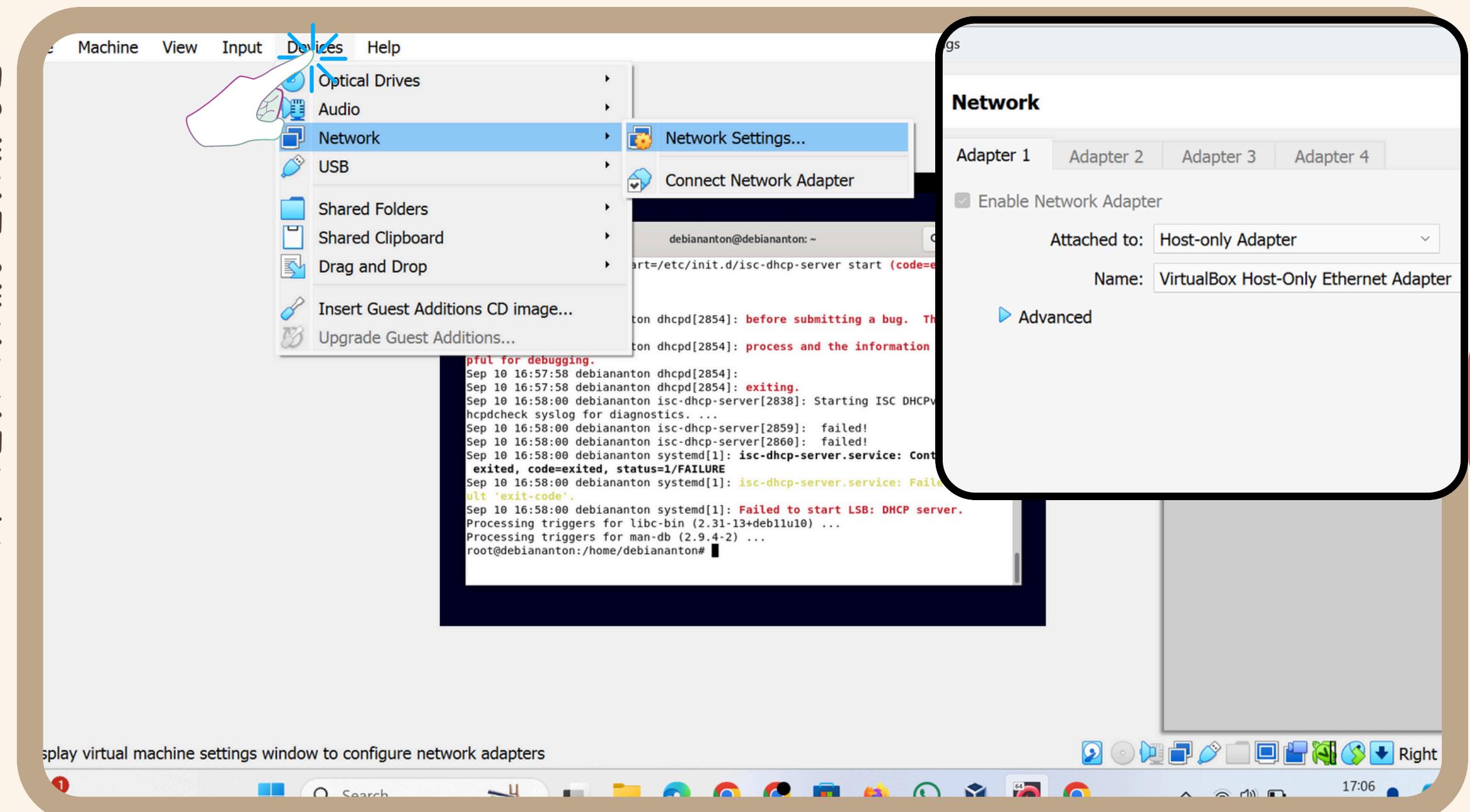
SETELAH SELESAI UPDATE, MASUKKAN PERINTAH APT INSTALL ISC-DHCP-SERVER. JIKA ADA PERTANYAAN "DO YOU WANT TO CONTINUE?" KETIK "Y"

```
root@debiananton:/home/debiananton# apt-get update
Hit:1 http://security.debian.org/debian-security bullseye-security InRelease
Hit:2 http://deb.debian.org/debian bullseye InRelease
Get:3 http://deb.debian.org/debian bullseye-updates InRelease [44.1 kB]
Fetched 44.1 kB in 1s (30.2 kB/s)
Reading package lists... Done
root@debiananton:/home/debiananton# apt install isc-dhcp-server
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  libirs-export161 libisccfg-export163 policycoreutils selinux-utils
Suggested packages:
  isc-dhcp-server-ldap
The following NEW packages will be installed:
  isc-dhcp-server libirs-export161 libisccfg-export163 policycoreutils
    selinux-utils
0 upgraded, 5 newly installed, 0 to remove and 201 not upgraded.
Need to get 1,703 kB of archives.
After this operation, 6,915 kB of additional disk space will be used.
Do you want to continue? [Y/n] ■
```

3

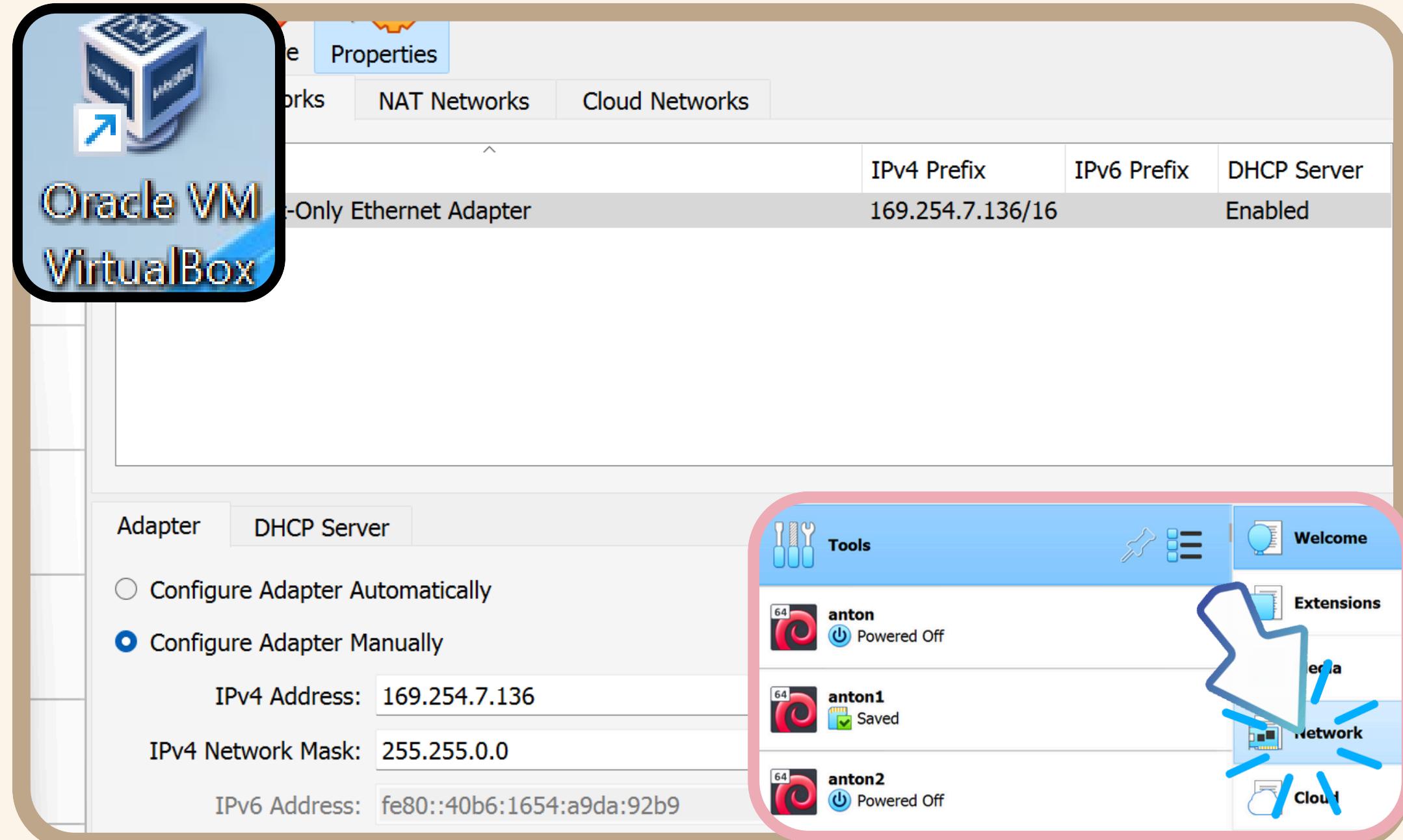
## GANTI ADAPTER MENJADI HOST-ONLY ADAPTER

SETELAH SELESAI  
MENGINSTALL DHCP  
BERALIH KE  
“DEVICES” DI POJOK  
KIRI ATAS KEMUDIAN  
PILIH “NETWORK”,  
LALU MASUK KE  
“NETWORK  
SETTINGS”  
SETELAH MASUK  
UBAH BAGIAN  
“ATTACHED TO”  
MENJADI “HOST-  
ONLY ADAPTER”



## SETTING IPV4 MENJADI DIANTARA LOWER-UPPER

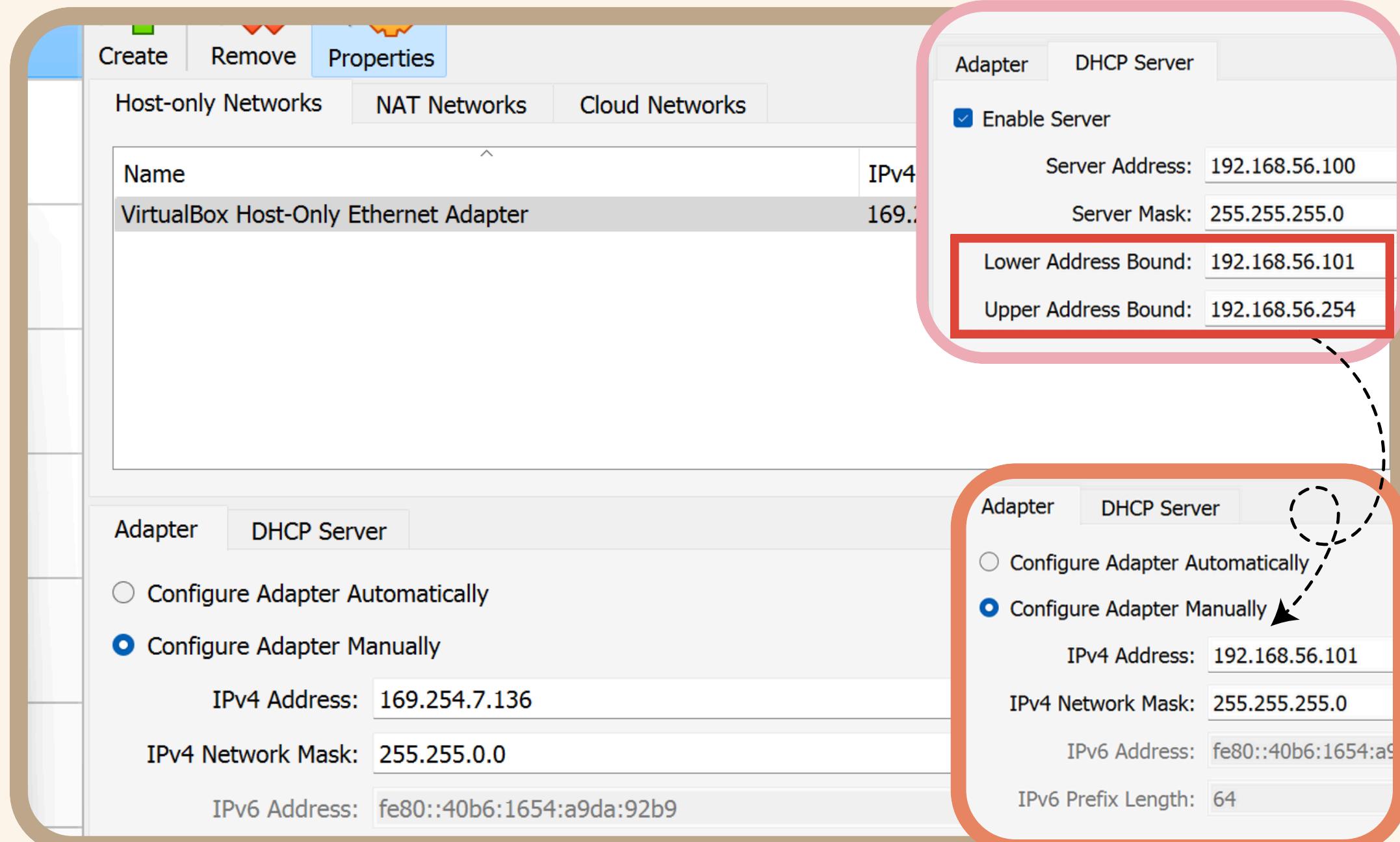
BERALIH KE VIRTUALBOX, TEKAN BAGIAN TOOLS, KEMUDIAN PILIH "NETWORK" PADA BAGIAN ADAPTER PILIH "ADAPTER MANUALLY".



5

## SETTING IPV4 MENJADI DIANTARA LOWER-UPPER

UBAH IPV4 ADDRESS NYA MENJADI IP YANG BERADA DI ANTARA RANGE "LOWER-UPPER ADDRESS" DI DHCP SERVER, SESUAIKAN JUGA NETWORK MASKNYA



5

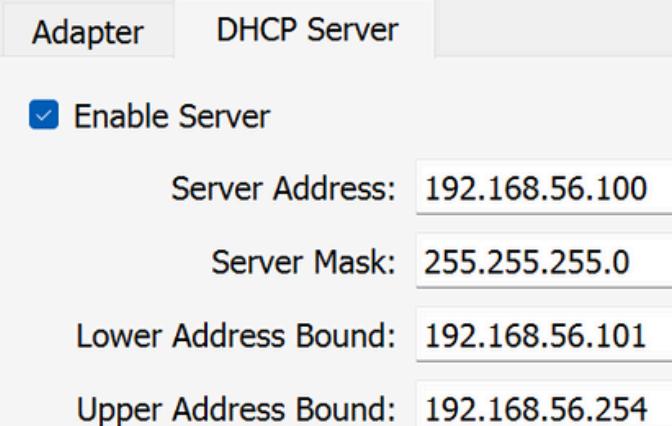
## MASUKKAN PERINTAH NANO /ETC/DHCP/DHCPD.CONF UNTUK MEMBUKA FILE DHCP

BERALIH KE DEBIAN KEMBALI, KEMUDIAN MASUKKAN PERINTAH NANO /ETC/DHCP /DHCPD.CONF. TURUNKAN HINGGA MENEMUKN KATA-KATA YAG MIRIP SEPERTI GAMBAR DISAMPING, HILANGKAN "#" NYA. KEMUDIAN UBAH BAGIAN RANGE, SUBNET, DAN NETMASK, SESUAI DENGAN DHCP SERVER DI VIRTUALBOX. JIKA SUDAH TEKAN "CTRL + X", LALU KETIK "Y" DAN TEKAN "ENTER"

```
GNU nano 5.4                               /etc/dhcp/dhcpd.conf *
# range dynamic-bootp 10.254.239.40 10.254.239.60;
# option broadcast-address 10.254.239.31;
# option routers rtr-239-32-1.example.org;
#}

# A slightly different configuration for an internal subnet
subnet 192.168.56.100 netmask 255.255.255.0 {
    range 192.168.56.101 192.168.56.254;
    option domain-name-servers ns1.internal.example.org;
    option domain-name "internal.example.org";
    option routers 10.5.5.1;
    option broadcast-address 10.5.5.31;
    default-lease-time 600;
    max-lease-time 7200;
}

# Hosts which require special configuration options can be listed in
# host statements. If no address is specified, the address will be
# allocated dynamically (if possible), but the host-specific information
# will still come from the host declaration
root@debiananton:/home/debiananton# nano /etc/dhcp/dhcpd.conf
```



7

## MASUKKAN PERINTAH "NANO /ETC/DEFAULT/ISC-DHCP-SERVER"

MASUKKAN PERINTAH  
"NANO  
/ETC/DEFAULT/ISC-  
DHCP-SERVER"  
MASUKKAN "ENP0S3"  
PADA BAGIAN  
INTERFACESV4, LALU  
TAMBAHKAN "#" PADA  
INTERFACESV6,  
SETELAH ITU TEKAN  
"CTRL + X" LALU KETIK  
"Y" DAN "ENTER"

```
GNU nano 5.4          /etc/default/isc-dhcp-server *
# Defaults for isc-dhcp-server (sourced by /etc/init.d/isc-dhcp-server)

# Path to dhcpcd's config file (default: /etc/dhcp/dhcpcd.conf).
#DHCPDv4_CONF=/etc/dhcp/dhcpcd.conf
#DHCPDv6_CONF=/etc/dhcp/dhcpcd6.conf

# Path to dhcpcd's PID file (default: /var/run/dhcpcd.pid).
#DHCPDv4_PID=/var/run/dhcpcd.pid
#DHCPDv6_PID=/var/run/dhcpcd6.pid

# Additional options to start dhcpcd with.
#       Don't use options -cf or -pf here; use DHCPD_CONF/ DHCPD_PID instead
#OPTIONS=""

# On what interfaces should the DHCP server (dhcpcd) serve DHCP requests?
#       Separate multiple interfaces with spaces, e.g. "eth0 eth1".
INTERFACESv4="enp0s3"
#INTERFACESv6=""

File Name to Write: /etc/default/isc-dhcp-server
[Save] [M-PDOC Format] [M-A Amend] [M-B Backup]
```

# RESTART NETWORK

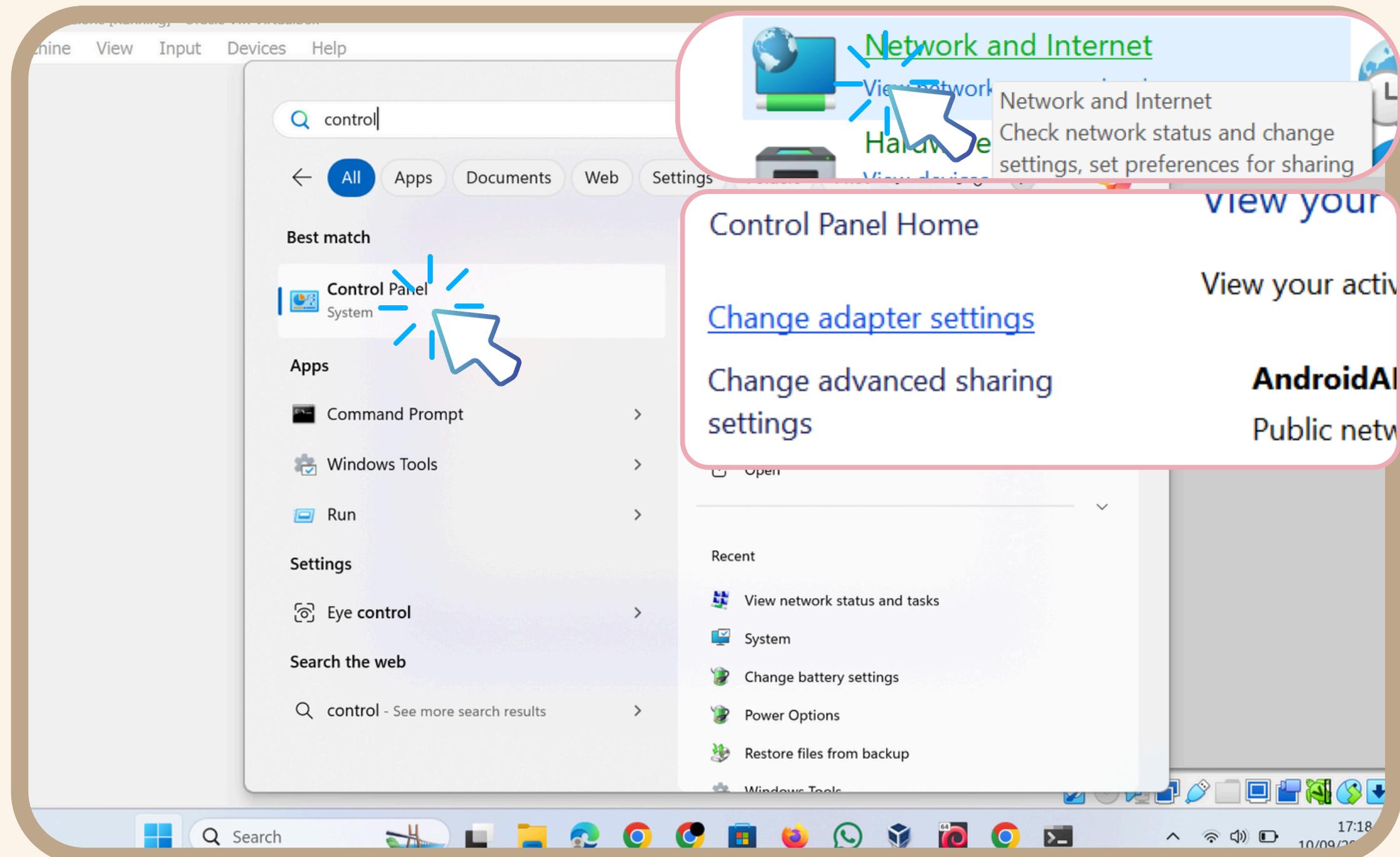
MASUKKAN  
PERINTAH  
“SYSTEMCTL  
RESTART  
NETWORKING”

8

```
Sep 10 16:57:58 debiananton dhcpd[2854]: before submitting a bug. These lines may contain sensitive information about your system. Please redact or xplain the proper
Sep 10 16:57:58 debiananton dhcpd[2854]: process and the information we
Sep 10 16:57:58 debiananton dhcpd[2854]: pful for debugging.
Sep 10 16:57:58 debiananton dhcpd[2854]:
Sep 10 16:57:58 debiananton dhcpd[2854]: exiting.
Sep 10 16:58:00 debiananton isc-dhcp-server[2838]: Starting ISC DHCPv4 server...
Sep 10 16:58:00 debiananton dhcpdcheck syslog for diagnostics. ...
Sep 10 16:58:00 debiananton isc-dhcp-server[2859]: failed!
Sep 10 16:58:00 debiananton isc-dhcp-server[2860]: failed!
Sep 10 16:58:00 debiananton systemd[1]: isc-dhcp-server.service: Control process exited, code=exited, status=1/FAILURE
Sep 10 16:58:00 debiananton systemd[1]: isc-dhcp-server.service: Failed
Sep 10 16:58:00 debiananton systemd[1]: isc-dhcp-server.service: Failed
ult 'exit-code'.
Sep 10 16:58:00 debiananton systemd[1]: Failed to start LSB: DHCP server
Processing triggers for libc-bin (2.31-13+deb11u10) ...
Processing triggers for man-db (2.9.4-2) ...
root@debiananton:/home/debiananton# nano /etc/dhcp/dhcpd.conf
root@debiananton:/home/debiananton# nano /etc/default/isc-dhcp-server
root@debiananton:/home/debiananton# systemctl restart networking
```

## CEK NETWORK CONNECTION DI CONTROL PANEL

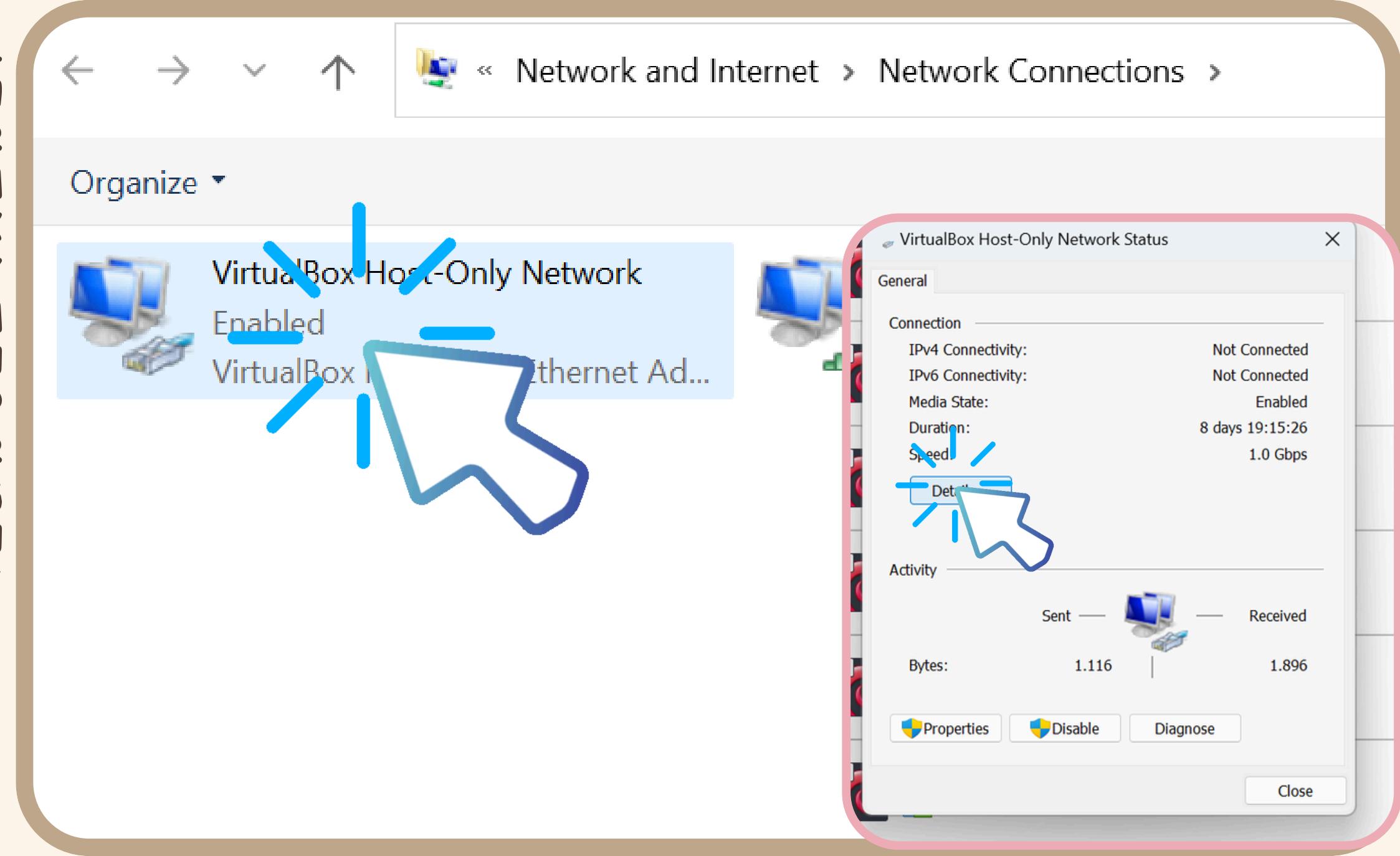
BUKA "CONTROL PANEL" MASUK KE BAGIAN (NETWORK AND INTERNET "VIEW NETWORK STATUS") KEMUDIAN PILIH "CHANGE ADAPTER SETTINGS"



9

## CEK NETWORK CONNECTION DI CONTROL PANEL

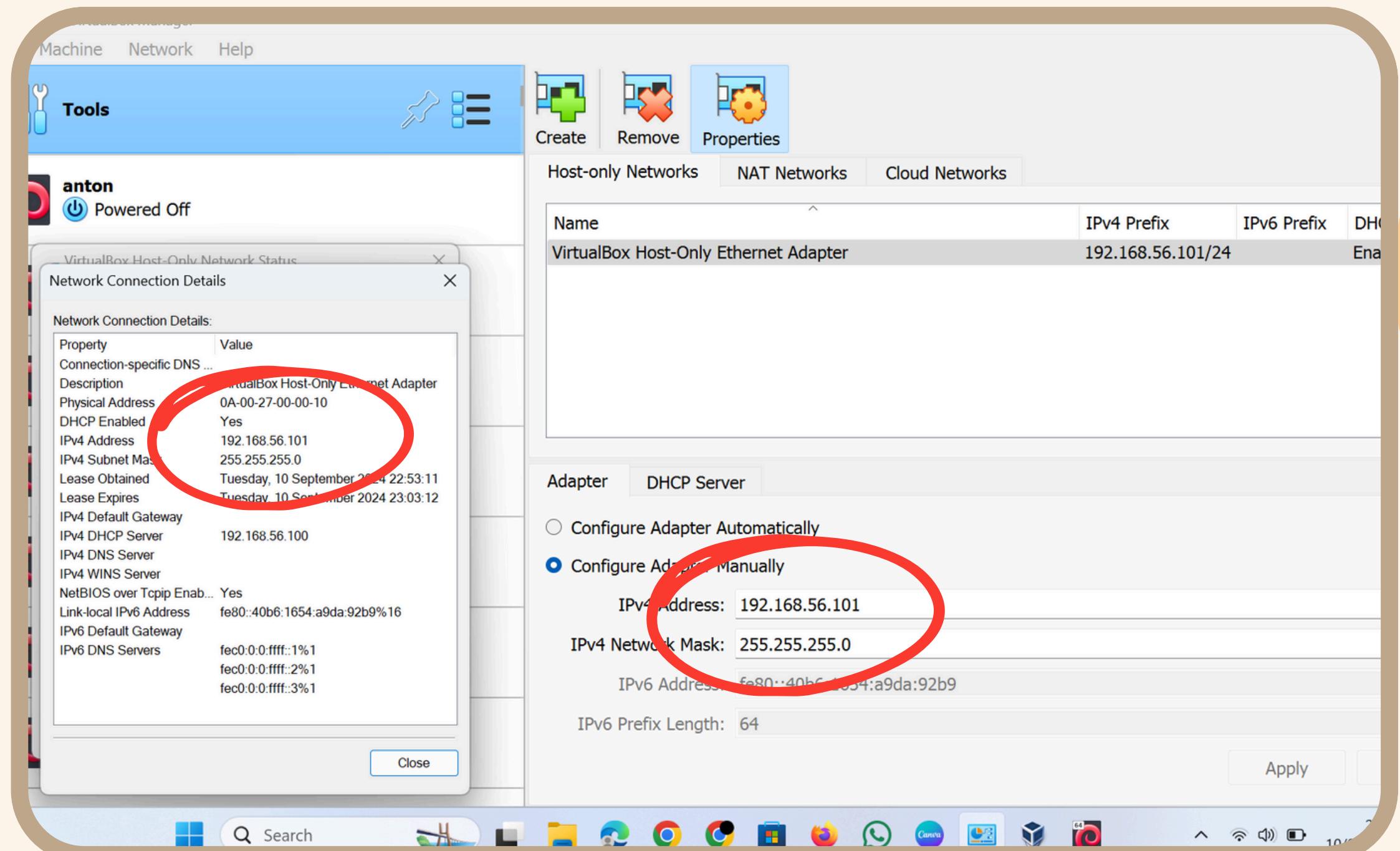
SETELAH MUNCUL  
TAMPILAN SEPERTI  
GAMBAR  
DISAMPING PILIH  
YANG "VIRTUALBOX  
HOST-ONLY  
NETWORK" SETELAH  
DITEKAN AKAN  
MUNCUL POP UP  
SEPERTI GAMBAR  
DISAMPING  
KEMUDIAN TEKAN  
"DETAILS"



9

## HASIL AKHIR

JIKA DHCP ENABLED  
TERTULIS "YES" DAN  
IPV4 ADDRESS  
SERTA SUBNET  
MASKNYA SUDAH  
SESUAI MAKA  
KONFIGURASI DHCP  
SERVER TELAH  
BERHASIL



9

# Thank You

By JONATHAN ANTONIO