

## dokumentasi tentang instalasi bind9 Server

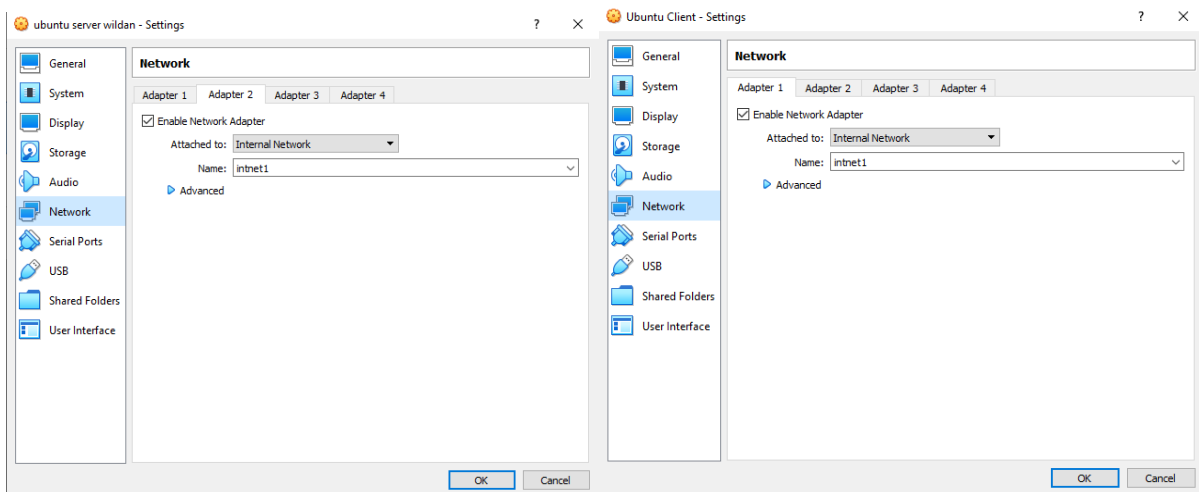
Nama: Wildan Aburrasyid

Kelas: 11 TKJ 2

**BIND** atau **BIND9** (Baca *Bain*) atau **NAMED** (Baca *Neim di*) merupakan software DNS (*Domain Name System*) di Internet. Dalam sebuah server Linux, **BIND** merupakan hal paling penting dan harus ada. BIND sebenarnya merupakan akronim atau kependekan dari Berkeley Internet Name Domain Versi BIND terbaru saat artikel ini ditulis adalah BIND9 yang dirilis pada tahun 2000.

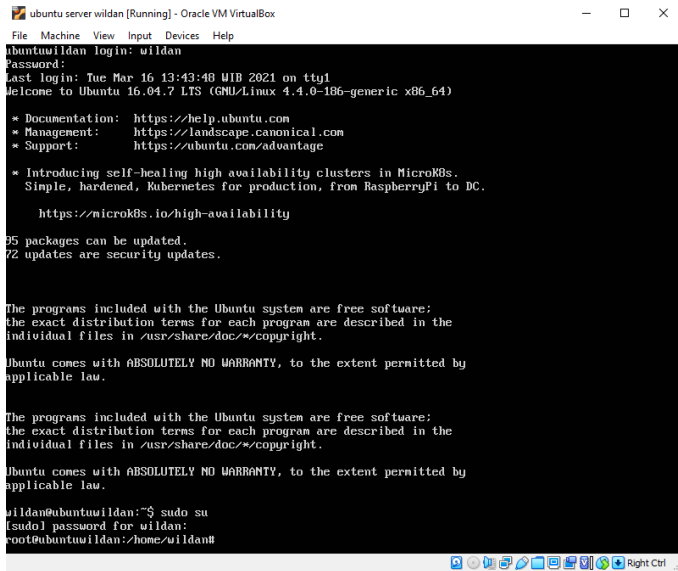
BIND atau BIND9 adalah salah satu DNS server yang akan mengatur pointing domain dan subdomain anda di VPS tersebut atau ke server lainnya yang berhubungan dengan domain Anda. Anda yang terbiasa menggunakan panel web seperti cPanel atau panel lainnya mungkin saja belum terbiasa dengan pengaturan ini karena di VPS yang dilengkapi dengan web panel pengaturan DNS akan diatur secara otomatis oleh panel kecuali jika dibutuhkan pengaturan tambahan.

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.

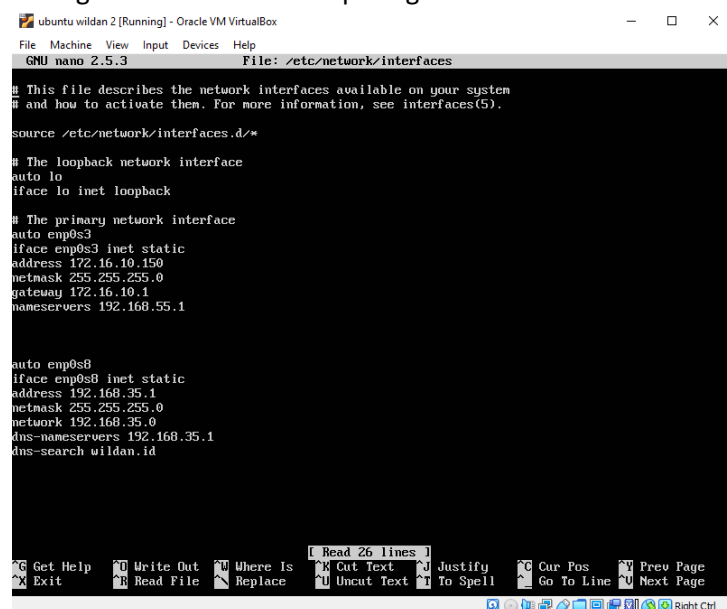
Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

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

4. Masuk ke network interface dengan cara ketikkan perintah.

**Sudo nano /etc/network/interfaces**

5. Setting network interface seperti gambar berikut.



```
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 static
address 172.16.10.150
netmask 255.255.255.0
gateway 172.16.10.1
nameservers 192.168.55.1

auto enp0s8
iface enp0s8 inet static
address 192.168.35.1
netmask 255.255.255.0
network 192.168.35.0
dns-nameservers 192.168.35.1
dns-search wildan.id
```

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*[[A
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
           L50-lsserv.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: 1
  Memory: 892.0K
  CPU: 440ms
  CGroup: /system.slice/networking.service
           └─1818 /sbin/dhclient -1 -v -pf /run/dhclient.emps3.pid -lf /var/lib/dhclient/emps3

Mar 16 13:49:17 ubuntuwildan ifup[1769]: DHCPDISCOVER on emp0s3 to 255.255.255.255 port 67 interval
Mar 16 13:49:17 ubuntuwildan dhclient[1785]: DHCPREQUEST of 172.16.10.150 on emp0s3 to 255.255.255.2
Mar 16 13:49:17 ubuntuwildan ifup[1769]: DHCPREQUEST of 172.16.10.150 on emp0s3 to 255.255.255.2
Mar 16 13:49:17 ubuntuwildan ifup[1769]: DHCPPOFFER of 172.16.10.150 from 172.16.10.1
Mar 16 13:49:17 ubuntuwildan dhclient[1785]: DHCPPOFFER 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. Masuk ke settingan dns interfaces dengan cara ketikkan perintah.

Nano /etc/resolv.conf

8. Cek apakah sudah benar atau tidak seperti gambar berikut.

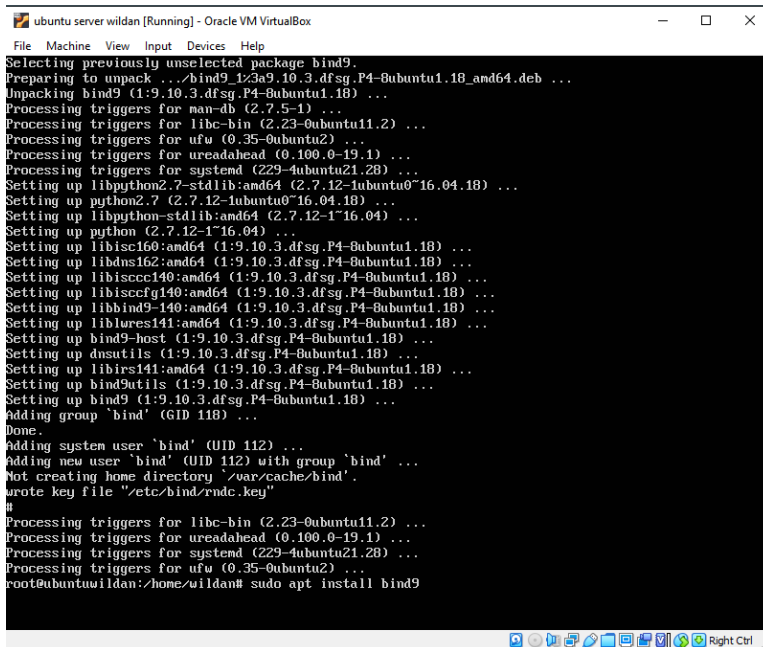
```
ubuntu wildan 2 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
GNU nano 2.5.3 File: /etc/resolv.conf

# Dynamic resolv.conf(5) file for glibc resolver(3) generated by resolvconf(8)
#     DO NOT EDIT THIS FILE BY HAND -- YOUR CHANGES WILL BE OVERWRITTEN
nameserver 192.168.35.1
search wildan.id

[ Read 4 lines ]
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
```

9. Install samba server dengan mengetikkan perintah.

Sudo apt install bind9

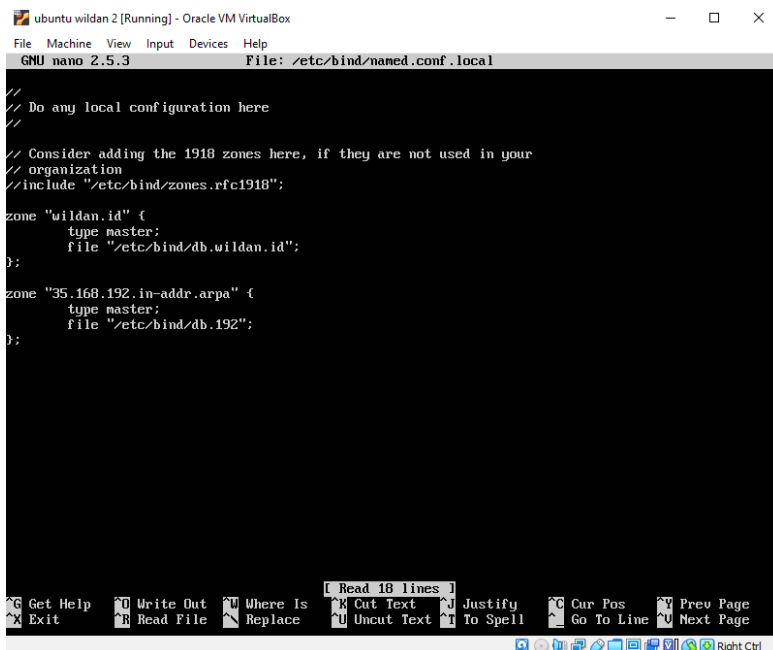


```
ubuntu server wildan [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Selecting previously unselected package bind9.
Preparing to unpack .../bind9_1:9.10.3.dfsg.P4-8ubuntu1.18_amd64.deb ...
Unpacking bind9 (1:9.10.3.dfsg.P4-8ubuntu1.18) ...
Processing triggers for man-db (2.7.5-1) ...
Processing triggers for libc-bin (2.23-0ubuntu11.2) ...
Processing triggers for ufw (0.35-0ubuntu2) ...
Processing triggers for ureadahead (0.100.0-19.1) ...
Processing triggers for systemd (229-4ubuntu21.28) ...
Setting up libpython2.7-stdlib:amd64 (2.7.12-1ubuntu0~16.04.18) ...
Setting up python2.7 (2.7.12-1ubuntu0~16.04.18) ...
Setting up libpython-stdlib:amd64 (2.7.12-1~16.04) ...
Setting up python (2.7.12-1~16.04) ...
Setting up libisc160:amd64 (1:9.10.3.dfsg.P4-8ubuntu1.18) ...
Setting up libdns162:amd64 (1:9.10.3.dfsg.P4-8ubuntu1.18) ...
Setting up libisccc140:amd64 (1:9.10.3.dfsg.P4-8ubuntu1.18) ...
Setting up libiscfg140:amd64 (1:9.10.3.dfsg.P4-8ubuntu1.18) ...
Setting up libbind9-140:amd64 (1:9.10.3.dfsg.P4-8ubuntu1.18) ...
Setting up liblwres141:amd64 (1:9.10.3.dfsg.P4-8ubuntu1.18) ...
Setting up bind9-host (1:9.10.3.dfsg.P4-8ubuntu1.18) ...
Setting up dnstools (1:9.10.3.dfsg.P4-8ubuntu1.18) ...
Setting up libirs141:amd64 (1:9.10.3.dfsg.P4-8ubuntu1.18) ...
Setting up bind9utils (1:9.10.3.dfsg.P4-8ubuntu1.18) ...
Setting up bind9 (1:9.10.3.dfsg.P4-8ubuntu1.18) ...
Adding group 'bind' (GID 118) ...
Done.
Adding system user 'bind' (UID 112) ...
Adding new user 'bind' (UID 112) with group 'bind' ...
Not creating home directory '/var/cache/bind'.
wrote key file '/etc/bind/rndc.key'
#
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@ubuntuwildan:~# sudo apt install bind9
```

10. Masuk ke settingan dns server dengan cara ketikkan perintah.

```
nano /etc/bind/named.conf.local
```

11. Setting seperti gambar berikut.



```
ubuntu wildan 2 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
GNU nano 2.5.3 File: /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 "wildan.id" {
    type master;
    file "/etc/bind/db.wildan.id";
};

zone "35.168.192.in-addr.arpa" {
    type master;
    file "/etc/bind/db.192";
};
```

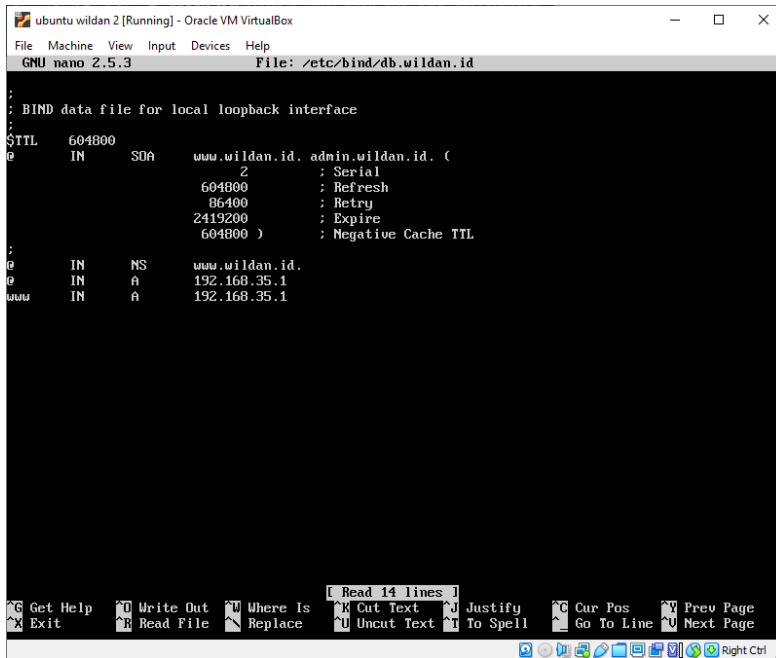
12. Masuk dan copy dns server dengan cara ketikkan perintah.

```
Cd /etc/bind
Cp db.local db.wildan.id
Cp db.127 db.192
```

13. Masuk ke settingan domain dengan cara ketikkan perintah.

```
Nano /etc/bind/db.wildan.id
```

14. Setting seperti gambar berikut.



```
ubuntu wildan 2 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
GNU nano 2.5.3 File: /etc/bind/db.wildan.id

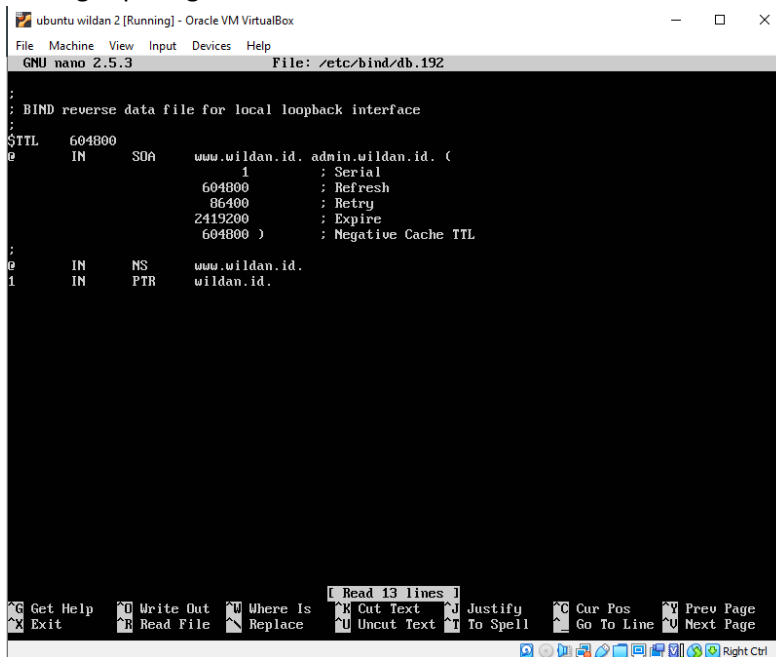
; BIND data file for local loopback interface
;
$TTL 604800
@ IN SOA www.wildan.id. admin.wildan.id. (
; Serial
604800 ; Refresh
86400 ; Retry
2419200 ; Expire
604800 ) ; Negative Cache TTL
;
@ IN NS www.wildan.id.
@ IN A 192.168.35.1
www IN A 192.168.35.1

[ Read 14 lines ]
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
Right Ctrl
```

15. Masuk ke settingan ip dengan cara ketikkan perintah.

Nano /etc/bind/db.192

16. Setting seperti gambar berikut.



```
ubuntu wildan 2 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
GNU nano 2.5.3 File: /etc/bind/db.192

; BIND reverse data file for local loopback interface
;
$TTL 604800
@ IN SOA www.wildan.id. admin.wildan.id. (
; Serial
604800 ; Refresh
86400 ; Retry
2419200 ; Expire
604800 ) ; Negative Cache TTL
;
@ IN NS www.wildan.id.
1 IN PTR wildan.id.
```

17. Di nslookup untuk mengecek dns server, dengan cara ketikkan perintah.

Nslookup wildan.id

```
ubuntu wildan 2 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help

1 : Serial
604800 : Refresh
86400 : Retry
2419200 : Expire
604800 ) : Negative Cache TTL

;
e IN NS www.wildan.id.
1 IN PTR wildan.id.

root@ubuntuwildan:/home/wildan# nslookup wildan.id
Server: 192.168.35.1
Address: 192.168.35.1#53

Name: wildan.id
Address: 192.168.35.1

root@ubuntuwildan:/home/wildan#
```

18. Masuk dengan cara ketikkan perintah.

Nano /etc/named.conf.options

19. Setting seperti gambar berikut.

```
ubuntu wildan 2 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
GNU nano 2.5.3 File: /etc/bind/named.conf.options

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 {
        0.0.0.0;
    };

    // If BIND logs error messages about the root key being expired,
    // you will need to update your keys. See https://www.isc.org/bind-keys
    // =====
    dnssec-validation auto;

    auth-nxdomain no; # conform to RFC1035
    listen-on-v6 { any; };
};

[ Read 26 lines ]
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
```

20. Masuk settingan dhcp dengan cara ketikkan perintah.

Nano /etc/dhcp/dhcpd.conf

21. Setting seperti gambar berikut.

The image consists of two screenshots of a nano editor window titled 'ubuntu wildan 2 [Running] - Oracle VM VirtualBox'. The window shows the configuration file `/etc/dhcp/dhcpd.conf`.  
The top screenshot shows the initial configuration with a red circle highlighting the following lines:  

```
option domain-name "wildan.id";  
option domain-name-servers 192.168.35.1;  
default-lease-time 600;  
max-lease-time 7200;
```

  
The bottom screenshot shows the same file after editing, with the following content:  

```
# This is a very basic subnet declaration.  
  
#subnet 10.254.239.0 netmask 255.255.255.224 {  
#   range 10.254.239.10 10.254.239.20;  
#   option routers rtr-239-0-1.example.org, rtr-239-0-2.example.org;  
#}  
  
# This declaration allows BOOTP clients to get dynamic addresses,  
# which we don't really recommend.  
  
#subnet 10.254.239.32 netmask 255.255.255.224 {  
#   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 192.168.35.0 netmask 255.255.255.0 {  
  range 192.168.35.5 192.168.35.30;  
  option domain-name-servers 192.168.35.1;  
  option domain-name "wildan.id";  
  option subnet-mask 255.255.255.0;  
  option routers 192.168.35.1;  
  option broadcast-address 192.168.35.255;  
  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
```

22. Buka Ubuntu client.

23. Buka dan cek mozilla seperti gambar berikut.

