

## 08 Soal

Bind 9 adalah suatu domain name service untuk merubah atau translate alamat ip ke alamat yang mudah di ingat oleh pengguna misal contoh kasus di sini ;

- Pertama-tama setelah semua dependensi di install dengan bind9 lalu berikut ini file yang akan di konfigurasi
  1. Named.conf (Untuk Redirect DNS)
  2. Zona Reverse (Translate IP ke Domain)
  3. Zona Forward (Translate Domain ke IP)
- Contoh disini akan membuat dns dumbways.com dengan Record ns1, ns2 , @ , mail , www dan subdomain.

- Install Dependensi

```
ubuntu@ip-172-31-21-134:~$ sudo apt-get install apache2 -y
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  apache2-bin apache2-data apache2-utils libapr1 libaprutil1 libaprutil1-dbd-sqlite3 libaprutil1-ldap liblua5.2-0 ssl-cert
Suggested packages:
  www-browser apache2-doc apache2-suexec-pristine | apache2-suexec-custom openssl-blacklist
The following NEW packages will be installed:
  apache2 apache2-bin apache2-data apache2-utils libapr1 libaprutil1 libaprutil1-dbd-sqlite3 libaprutil1-ldap liblua5.2-0 ssl-cert
0 upgraded, 10 newly installed, 0 to remove and 0 not upgraded.
Need to get 1729 kB of archives.
After this operation, 6985 kB of additional disk space will be used.
Get:1 http://ap-southeast-1.ec2.archive.ubuntu.com/ubuntu bionic/main amd64 libapr1 amd64 1.6.3-2 [90.9 kB]
Get:2 http://ap-southeast-1.ec2.archive.ubuntu.com/ubuntu bionic/main amd64 libaprutil1 amd64 1.6.1-2 [84.4 kB]
Get:3 http://ap-southeast-1.ec2.archive.ubuntu.com/ubuntu bionic/main amd64 libaprutil1-dbd-sqlite3 amd64 1.6.1-2 [10.6 kB]
Get:4 http://ap-southeast-1.ec2.archive.ubuntu.com/ubuntu bionic/main amd64 libaprutil1-ldap amd64 1.6.1-2 [8764 B]
Get:5 http://ap-southeast-1.ec2.archive.ubuntu.com/ubuntu bionic/main amd64 liblua5.2-0 amd64 5.2.4-1.1build1 [108 kB]
Get:6 http://ap-southeast-1.ec2.archive.ubuntu.com/ubuntu bionic-updates/main amd64 apache2-bin amd64 2.4.29-1ubuntu4.14 [1070 kB]
Get:7 http://ap-southeast-1.ec2.archive.ubuntu.com/ubuntu bionic-updates/main amd64 apache2-utils amd64 2.4.29-1ubuntu4.14 [83.9 kB]
Get:8 http://ap-southeast-1.ec2.archive.ubuntu.com/ubuntu bionic-updates/main amd64 apache2-data all 2.4.29-1ubuntu4.14 [160 kB]
Get:9 http://ap-southeast-1.ec2.archive.ubuntu.com/ubuntu bionic-updates/main amd64 apache2 amd64 2.4.29-1ubuntu4.14 [95.1 kB]
Get:10 http://ap-southeast-1.ec2.archive.ubuntu.com/ubuntu bionic/main amd64 ssl-cert all 1.0.39 [17.0 kB]
Fetched 1729 kB in 1s (3233 kB/s)
```

- Install Package Bind9 Beserta Tools nya.

```
ubuntu@ip-172-31-21-134:~$ sudo apt install bind9 bind9utils bind9-doc
```

- Mengaktifkan Package bind9 Start service (Pastikan bind sudah running)

```
[root@instance-1 muhammad_aulia_rahman68]# systemctl start named
[[root@instance-1 muhammad_aulia_rahman68]# systemctl status named
● named.service - Berkeley Internet Name Domain (DNS)
   Loaded: loaded (/usr/lib/systemd/system/named.service; disabled; vendor preset: disabled)
   Active: active (running) since Rab 2020-06-24 11:36:13 UTC; 15s ago
     Process: 14897 ExecStart=/usr/sbin/named -u named -c ${NAMEDCONF} $OPTIONS (code=exited, status=0/SUCCESS)
     Process: 14895 ExecStartPre=/bin/bash -c if [ ! "$DISABLE_ZONE_CHECKING" == "yes" ]; then /usr/sbin/named-ct
; fi (code=exited, status=0/SUCCESS)
    Main PID: 14899 (named)
      CGroup: /system.slice/named.service
              └─14899 /usr/sbin/named -u named -c /etc/named.conf
```

- Di sini agar permanen kita buat symlink apabila server mati atau restart conf masih dapat reload/running.

```
[root@instance-1 muhammad_aulia_rahman68]# systemctl enable named
Created symlink from /etc/systemd/system/multi-user.target.wants/named.service to /usr/lib/systemd/system/named.service.
```

- Secara Default Service Bind berada di /var/named nanti disini akan di cp sebagai default konfigurasi dengan file named.localhost .

```

[[root@instance-1 named]# cat named.localhost
$TTL 1D
@      IN SOA  @ rname.invalid. (
                                0      ; serial
                                1D     ; refresh
                                1H     ; retry
                                1W     ; expire
                                3H )   ; minimum

      NS      @
      A       127.0.0.1
      AAAA    ::1

```

- Untuk konfigurasi service bind berada /etc/named.conf dengan konfigurasi default seperti ini.

```

options {
    listen-on port 53 { 127.0.0.1; };
    listen-on-v6 port 53 { ::1; };
    directory      "/var/named";
    dump-file       "/var/named/data/cache_dump.db";
    statistics-file "/var/named/data/named_stats.txt";
    memstatistics-file "/var/named/data/named_mem_stats.txt";
    recursing-file  "/var/named/data/named.recursing";
    secroots-file   "/var/named/data/named.secroots";
    allow-query     { localhost; };
}

```

1. Listen-on port disini menerangkan IP dengan jenis ipv4 yang akan di ubah disini masih localhost.
2. Listen-on-v6 port disini menerangkan ipv6 yang di rubah

- Kita rubah Listen IPV4 menjadi all Ip dan IPV6 disable karena tidak di pakai.

```

options {
    listen-on port 53 { any; };
    #listen-on-v6 port 53 { ::1; };
    directory      "/var/named";
    dump-file       "/var/named/data/cache_dump.db";
    statistics-file "/var/named/data/named_stats.txt";
    memstatistics-file "/var/named/data/named_mem_stats.txt";
    recursing-file  "/var/named/data/named.recursing";
    secroots-file   "/var/named/data/named.secroots";
    allow-query     { localhost; any; };
    allow-query-cache { localhost; any; };
}

```

- Membuat Zona Forward & Reverse

```

zone Dumbysways.xyz
    type master;
    file "/etc/named/forward.zone";
};

zone "0.170.10.in-addr.arpa" {
    type master;
    file "/etc/named/reverse.zone";
};

```

- Membuat Transisi Zona Forward.zone

```

$TTL 86400
@ IN SOA Dumbysways.xyz root. Dumbysways.xyz
      2008111914 ;Serial
      3600      ;Refresh
      1800      ;Retry
      604800    ;Expire
      86400     ;Minimum TTL
)

@ IN NS ns1. Dumbysways.xyz
@ IN NS ns2.
@ IN A 10.170.0.2
ns1 IN A 10.170.0.2
ns2 IN A 10.170.0.2

```

- Membuat Transisi Zona Reverse.zone

```

$TTL 86400
@ IN SOA Dumbysways.xyz root. Dumbysways.xyz
      2018100902 ;Serial
      3600      ;Refresh
      1800      ;Retry
      604800    ;Expire
      86400     ;Minimum TTL

@ IN NS Dumbysways.xyz
@ IN NS
@ IN A 10.170.0.2
ns1 IN A 10.170.0.2
ns2 IN A 10.170.0.2

```

- Check Konfig named.conf

```

[[root@instance-1 named]# named-checkconf /etc/named.conf
[[root@instance-1 named]# █

```

- Check Konfig Reverse & forward dan restart service bind

```
[[root@instance-1 named]# sudo systemctl start named
[[root@instance-1 named]# sudo systemctl enable named
[[root@instance-1 named]#
```

- Buka Port firewall

```
[[root@instance-1 named]# netstat -nltup
Active Internet connections (only servers)
Proto Recv-Q Send-Q Local Address           Foreign Address         State       PID/Program name
tcp        0      0 127.0.0.1:53           0.0.0.0:*               LISTEN      14899/named
tcp        0      0 0.0.0.0:22             0.0.0.0:*               LISTEN      1784/sshd
tcp        0      0 127.0.0.1:953          0.0.0.0:*               LISTEN      14899/named
tcp        0      0 127.0.0.1:25           0.0.0.0:*               LISTEN      1150/master
tcp6       0      0 :::80                  :::*                   LISTEN      1127/httpd
tcp6       0      0 :::1:53                :::*                   LISTEN      14899/named
tcp6       0      0 :::21                  :::*                   LISTEN      15012/vsftpd
tcp6       0      0 :::22                  :::*                   LISTEN      1784/sshd
tcp6       0      0 :::1:953                :::*                   LISTEN      14899/named
tcp6       0      0 :::1:25                :::*                   LISTEN      1150/master
udp        0      0 127.0.0.1:53           0.0.0.0:*               14899/named
udp        0      0 0.0.0.0:68             0.0.0.0:*               600/dhclient
udp        0      0 127.0.0.1:323          0.0.0.0:*               432/chronyd
udp6       0      0 :::1:53                :::*                   14899/named
udp6       0      0 :::1:323                :::*                   432/chronyd
```

```
[[root@instance-1 named]# firewall-cmd --permanent --add-port=53/tcp
success
[[root@instance-1 named]# firewall-cmd --permanent --add-port=53/udp
success
[[root@instance-1 named]# firewall-cmd --reload
```

- Menambahkan Ip local di resolv.conf

```
nameserver 10.170.0.2
```

- Restart Network check semua conf

```
[[root@instance-1 named]# systemctl restart network
[[root@instance-1 named]# named-checkzone forward.zone /etc/named/forward.zone
zone forward.zone/IN: loaded serial 2008111914
OK
[[root@instance-1 named]# named-checkzone reverse.zone /etc/named/reverse.zone
zone reverse.zone/IN: loaded serial 2018100902
OK
```

- Cek apakah sudah propagation dns dumbways-aulia.xyz



## Apache2 Ubuntu Default Page

ubuntu

### It works!

This is the default welcome page used to test the correct operation of the Apache2 server after installation on Ubuntu systems. It is based on the equivalent page on Debian, from which the Ubuntu Apache packaging is derived. If you can read this page, it means that the Apache HTTP server installed at this site is working properly. You should **replace this file** (located at `/var/www/html/index.html`) before continuing to operate your HTTP server.

If you are a normal user of this web site and don't know what this page is about, this probably means that the site is currently unavailable due to maintenance. If the problem persists, please contact the site's administrator.

### Configuration Overview

Ubuntu's Apache2 default configuration is different from the upstream default configuration, and split into several files optimized for interaction with Ubuntu tools. The configuration system is **fully documented in `/usr/share/doc/apache2/README.Debian.gz`**. Refer to this for the full documentation. Documentation for the web server itself can be found by accessing the **manual** if the `apache2-doc` package was installed on this server.

The configuration layout for an Apache2 web server installation on Ubuntu systems is as follows: