

LATIHAN SERVER UKK

1. Konfigurasi jaringan menggunakan static
2. Update repository (repository bebas) dan update aplikasi.
3. Install semua paket yang dibutuhkan, bisa diinstall dengan satu perintah.
 - a. Openssh
 - b. Bind9
 - c. Dnsutils
 - d. Apache2
 - e. Php
 - f. Php-mysql
 - g. Mariadb-server
 - h. W3m
 - i. unzip

```
root@debian:~# apt install openssh-server bind9 dnsutils apache2 php mariadb-server w3m wget_
```

Pastikan paket yang diinstall ada dalam directory /etc

```
root@debian:/etc# ls
adduser.conf          ethertypes           locale.gen           passwd              shells
adjtime              fstab                localtime          passwd-            skel
alternatives         gai.conf             logcheck            perl                ssh
apache2              group                login.defs          php                 ssl
apparmor             group-               logrotate.conf     ppp                 subgid
apparmor.d           grub.d              logrotate.d        profile            subgid-
apt                  gshadow              machine-id          profile.d          subuid
bash.bashrc          gshadow-            magic               protocols          subuid-
bind                 gss                  magic.mime          python3            sv
bindresvport.blacklist host.conf            mailcap             python3.9          sysctl.conf
binfmt.d             hostname            mailcap.order      rc0.d              sysctl.d
ca-certificates     hosts               mime.types          rc1.d              systemd
ca-certificates.conf hosts.allow          mke2fs.conf        rc2.d              terminfo
console-setup        hosts.deny          modprobe.d         rc3.d              timezone
cron.d              init.d              modules            rc4.d              tmpfiles.d
cron.daily           initramfs-tools    modules-load.d     rc5.d              ucf.conf
cron.hourly          inputrc             motd               rc6.d              udev
cron.monthly         insserv.conf.d     mtab               rc8.d              ufw
crontab              iproute2            mysql              resolv.conf        update-motd.d
cron.weekly          issue              nanorc             rmt                vim
dbus-1              issue.net           netconfig          rpc                w3m
debconf.conf        kernel              network            rsyslog.conf      wgetrc
debian_version      kernel-img.conf    networks           rsyslog.d          X11
default             ldap                nftables.conf     runit              xattr.conf
deluser.conf        ld.so.cache         nsswitch.conf     security           xdg
dhcp                ld.so.conf          opt                selinux
dpkg                ld.so.conf.d        os-release         services
e2scrub.conf        libaudit.conf      pam.conf           shadow
environment         locale.alias        pam.d              shadow-
```

4. cek status ssh

```
root@debian:/etc# systemctl status sshd
• ssh.service - OpenBSD Secure Shell server
  Loaded: loaded (/lib/systemd/system/ssh.service;
  Active: active (running) since Sat 2023-02-25 04:
  Docs: man:sshd(8)
       man:sshd_config(5)
  Main PID: 2549 (sshd)
  Tasks: 1 (limit: 2343)
  Memory: 952.0K
  CPU: 1.129s
  CGroup: /system.slice/ssh.service
          └─2549 sshd: /usr/sbin/sshd -D [listener]
```

Jika sudah running lakukan remote melalui PC Client

```
debian@debian: ~
login as: debian
debian@192.168.10.1's password:
linux debian 5.10.0-9-686-pae #1 SMP Debian 5.10.70-1 (2021-09-
the programs included with the Debian GNU/Linux system are free
the exact distribution terms for each program are described in
individual files in /usr/share/doc/*/copyright.
Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the exte
permitted by applicable law.
last login: Sat Feb 25 04:40:10 2023 from 192.168.10.2
debian@debian:~$ ~

debian@debian:~$ su
Password:
root@debian:/home/debian#
```

5. cek versi apache yang terinstall (tidak wajib)

```
root@debian:/etc# apache2 -v
Server version: Apache/2.4.54 (Debian)
Server built: 2022-06-09T04:26:43
root@debian:/etc# cd /v
```

6. jalankan webserver dari sisi server dan client, jika muncul tampilan seperti di bawah maka webserver sudah berjalan

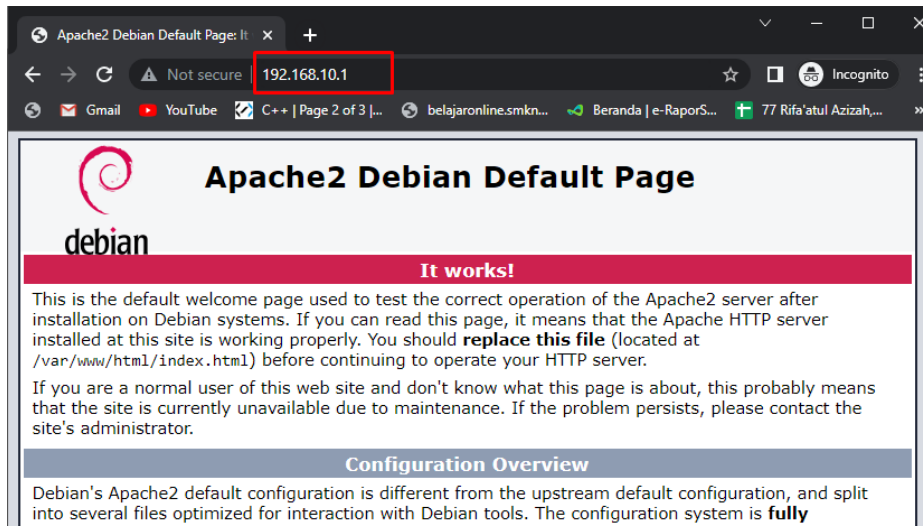
```
root@debian:/var/www# w3m 192.168.10.1
```

```
server [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Debian Logo Apache2 Debian Default Page
It works!

This is the default welcome page used to test the correct operation of
the Apache2 server after installation on Debian systems. 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
means that the site is currently unavailable due to maintenance. If the
problem persists, please contact the site's administrator.

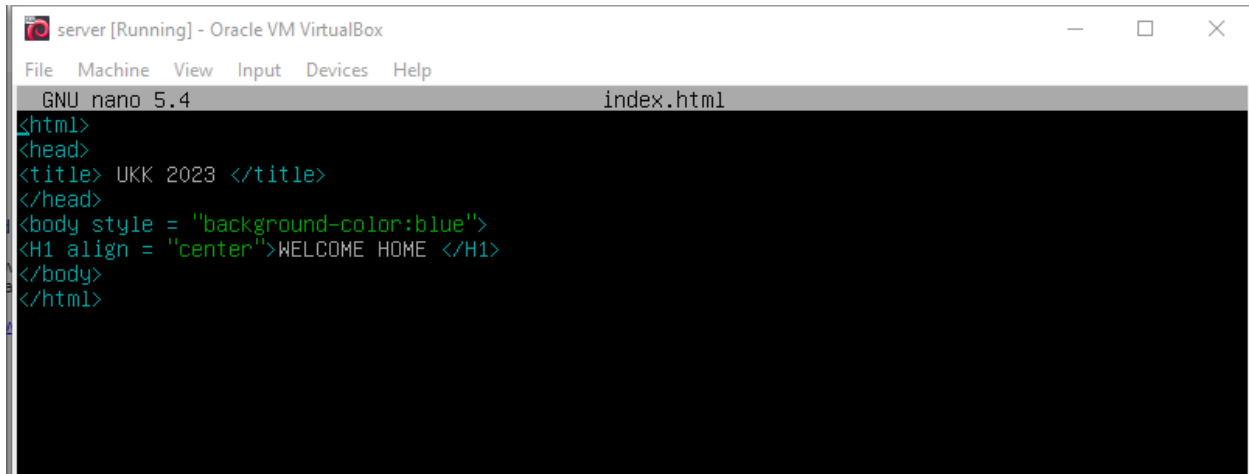
Configuration Overview
```



7. buat tampilan untuk web utama (contoh web yang akan digunakan nama.sch.id)
buat file index.html bisa menggunakan perintah cat, touch, atau langsung nano

```
root@debian:/etc/bind# cd /var/www/
root@debian:/var/www# ls
html
root@debian:/var/www# mkdir nama.sch.id
root@debian:/var/www# cd nama.sch.id/
root@debian:/var/www/nama.sch.id# touch index.html
root@debian:/var/www/nama.sch.id# ls
index.html
root@debian:/var/www/nama.sch.id# nano index.html
```

Isi atau edit file index.html



```
server [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
GNU nano 5.4 index.html
<html>
<head>
<title> UKK 2023 </title>
</head>
<body style = "background-color:blue">
<H1 align = "center">WELCOME HOME </H1>
</body>
</html>
```

8. konfigurasi atau tambahkan virtual host, buat 2 virtual host
 - a. untuk domain utama (nama.sch.id)
 - b. untuk subdomain(wordpress.nama.sch.id)
 - c. a2ensite semua virtualhost
 - d. a2dissite file utama
 - e. restart apache2

```
root@debian:/var/www/nama.sch.id# cd /etc/apache2/sites-available/
root@debian:/etc/apache2/sites-available# ls
000-default.conf default-ssl.conf
root@debian:/etc/apache2/sites-available# cp 000-default.conf nama.sch.id.conf
root@debian:/etc/apache2/sites-available# ls
000-default.conf default-ssl.conf nama.sch.id.conf
root@debian:/etc/apache2/sites-available# _
```

```
server [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
GNU nano 5.4 nama.sch.id.conf *
<VirtualHost *:80>
# The ServerName directive sets the request scheme, hostname and port that
# the server uses to identify itself. This is used when creating
# redirection URLs. In the context of virtual hosts, the ServerName
# specifies what hostname must appear in the request's Host: header to
# match this virtual host. For the default virtual host (this file) this
# value is not decisive as it is used as a last resort host regardless.
# However, you must set it for any further virtual host explicitly.
#ServerName www.example.com

ServerAdmin webmaster@localhost
DocumentRoot /var/www/nama.sch.id
Servername_nama.sch.id
ServerAlias www.nama.sch.id

# Available loglevels: trace8, ..., trace1, debug, info, notice, warn,
# error, crit, alert, emerg.
# It is also possible to configure the loglevel for particular
# modules, e.g.
#LogLevel info ssl:warn

ErrorLog ${APACHE_LOG_DIR}/error.log
```

```
root@debian:/etc/apache2# ls
apache2.conf  conf-enabled  magic          mods-enabled  sites-available
conf-available  envvars      mods-available  ports.conf    sites-enabled
root@debian:/etc/apache2# cd sites-
-bash: cd: sites-: No such file or directory
root@debian:/etc/apache2# cd sites-available/
root@debian:/etc/apache2/sites-available# ls
000-default.conf  default-ssl.conf  nama.sch.id.conf
root@debian:/etc/apache2/sites-available# cp 000-default.conf wordpress.conf
root@debian:/etc/apache2/sites-available# ls
000-default.conf  default-ssl.conf  nama.sch.id.conf  wordpress.conf
```

```
<VirtualHost *:80>
# The ServerName directive sets the request scheme, hostname and port that
# the server uses to identify itself. This is used when creating
# redirection URLs. In the context of virtual hosts, the ServerName
# specifies what hostname must appear in the request's Host: header to
# match this virtual host. For the default virtual host (this file) this
# value is not decisive as it is used as a last resort host regardless.
# However, you must set it for any further virtual host explicitly.
ServerName wordpress.nama.sch.id

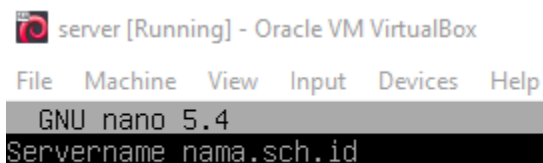
ServerAdmin webmaster@localhost
DocumentRoot /var/www/wordpress.nama.sch.id/wordpress

# Available loglevels: trace8, ..., trace1, debug, info, notice, warn,
# error, crit, alert, emerg.
# It is also possible to configure the loglevel for particular
# modules, e.g.
#LogLevel info ssl:warn
```

```
root@debian:/etc/apache2/sites-available# a2ensite nama.sch.id.conf
Enabling site nama.sch.id.
To activate the new configuration, you need to run:
  systemctl reload apache2
root@debian:/etc/apache2/sites-available# a2dissite 000-default.conf
Site 000-default disabled.
To activate the new configuration, you need to run:
  systemctl reload apache2
root@debian:/etc/apache2/sites-available# systemctl restart apache2
```

Tambahkan servername di directory conf-available (opsional, tapi sebaiknya di konfigurasi) dan restart apache2

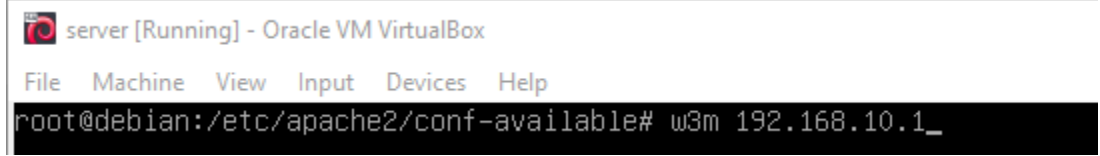
```
root@debian:/etc/apache2/conf-available# nano servername.conf
```



```
server [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
GNU nano 5.4
Servername nama.sch.id
```

```
root@debian:/etc/apache2/conf-available# ls
charset.conf          other-vhosts-access-log.conf  serve-cgi-bin.conf
localized-error-pages.conf  security.conf                 servername.conf
root@debian:/etc/apache2/conf-available# a2enconf servername
Enabling conf servername.
To activate the new configuration, you need to run:
  systemctl reload apache2
root@debian:/etc/apache2/conf-available# systemctl reload apache2
```

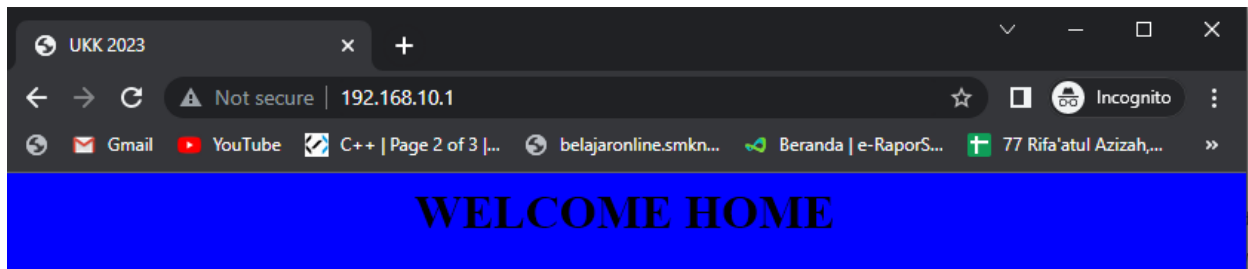
9. lakukan pengujian melalui server dan client



```
server [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
root@debian:/etc/apache2/conf-available# w3m 192.168.10.1_
```



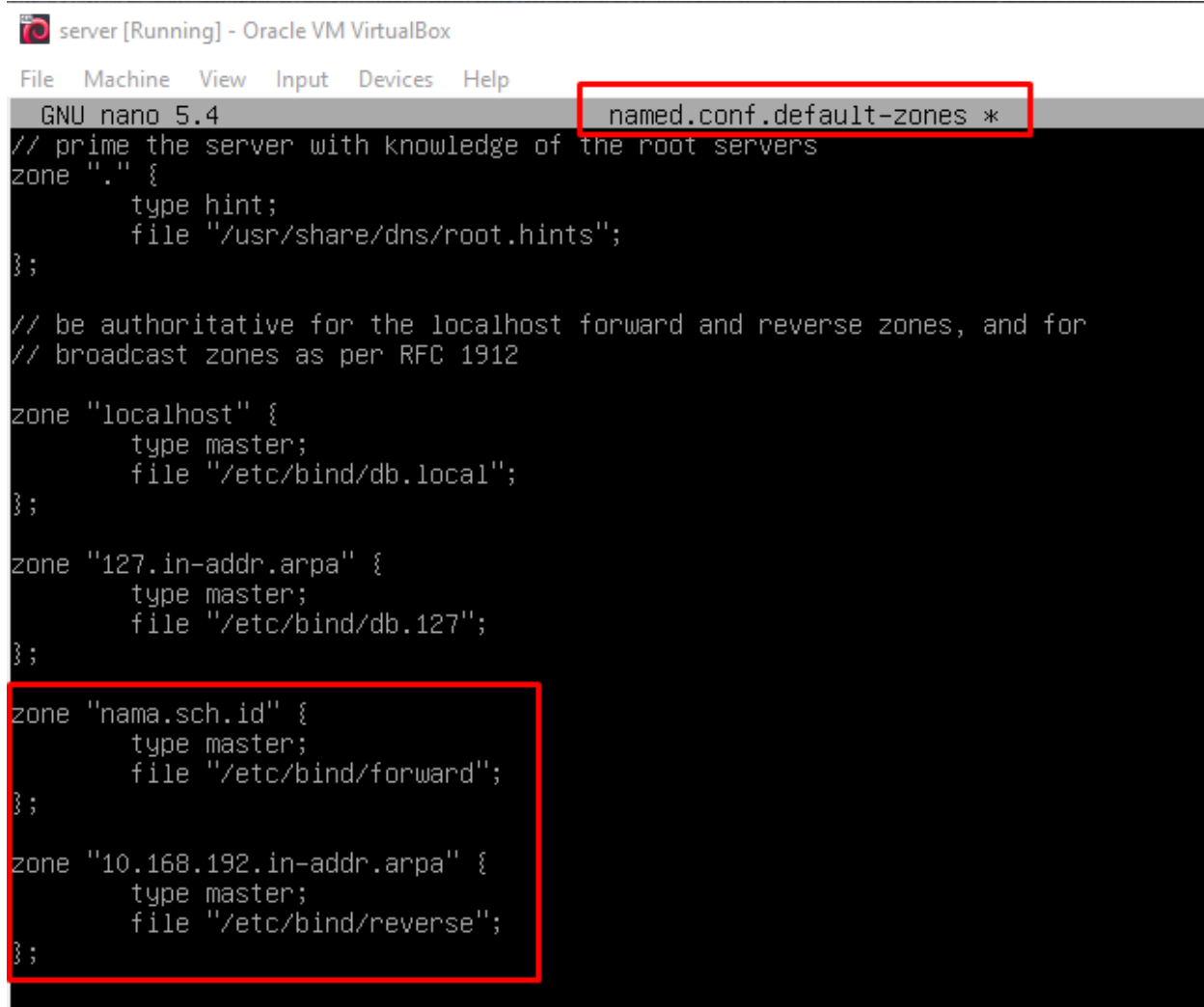
```
server [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
WELCOME HOME
```



10. konfigurasi DNS (pastikan bind9 sudah terinstal dan running)

```
root@debian:~# hostname -I
192.168.100.249 192.168.10.1
root@debian:~# hostname
debian
root@debian:~# systemctl restart bind9.service
root@debian:~# systemctl status bind9.service
```

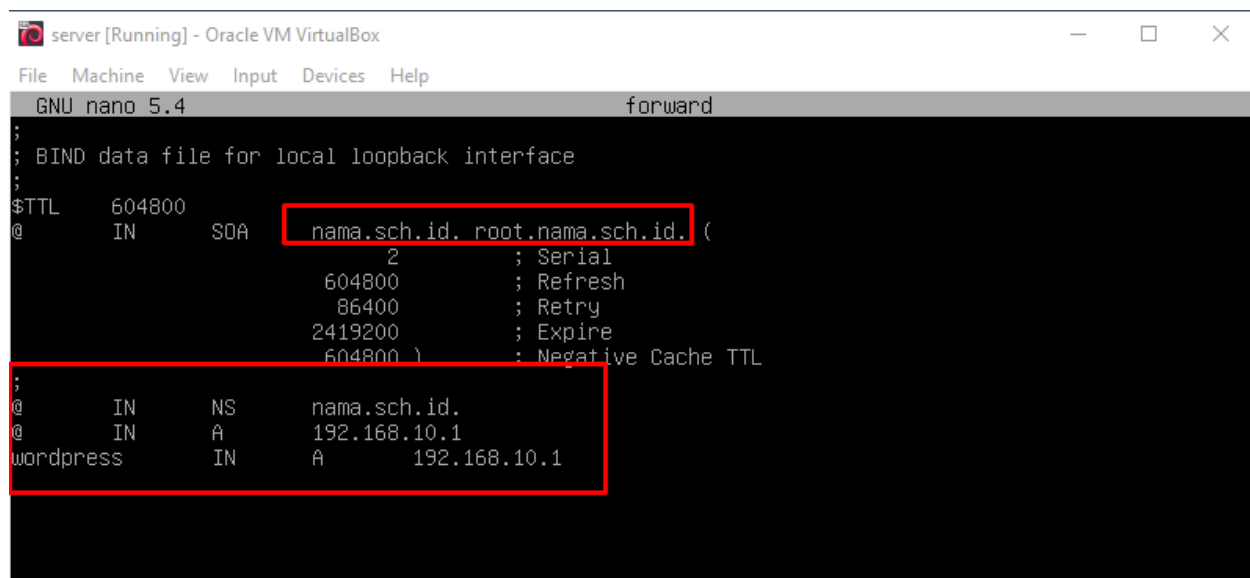
Edit file named.conf.default-zones atau bisa menambahkan melalui named.conf.local (sama saja)



Copy db.local dan db.127 menjadi forward dan reverse.

```
root@debian:/etc/bind# cp db.local forward
root@debian:/etc/bind# ls
bind.keys  db.255    forward      named.conf.local  zones.rfc1918
db.0       db.empty  named.conf   named.conf.options
db.127     db.local  named.conf.default-zones  rndc.key
root@debian:/etc/bind# cp db.127 reverse
root@debian:/etc/bind# ls
bind.keys  db.255    forward      named.conf.local  rndc.key
db.0       db.empty  named.conf   named.conf.options  zones.rfc1918
db.127     db.local  named.conf.default-zones  reverse
root@debian:/etc/bind# _
```

Konfigurasi file forward, tambahkan sekalian untuk subdomainnya



```
server [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
GNU nano 5.4 forward
;
; BIND data file for local loopback interface
;
$TTL      604800
@         IN      SOA      nama.sch.id. root.nama.sch.id. (
                        2          ; Serial
                        604800     ; Refresh
                        86400      ; Retry
                        2419200    ; Expire
                        604800 )   ; Negative Cache TTL
;
@         IN      NS       nama.sch.id.
@         IN      A        192.168.10.1
wordpress IN      A        192.168.10.1
```

Konfigurasi file reverse (teliti Kembali hasil konfigurasi)

```
root@debian:/etc/bind# nano reverse
```

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

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

Jangan lupa edit file resolver nya, restart bind dan cek hasil konfigurasi DNS.

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

nameserver 192.168.10.1
```

```
root@debian:/etc/bind# systemctl restart bind9.service
root@debian:/etc/bind# nslookup 192.168.10.1
1.10.168.192.in-addr.arpa      name = nama.sch.id.

root@debian:/etc/bind# nslookup wordpress.nama.sch.id
Server:          192.168.10.1
Address:         192.168.10.1#53

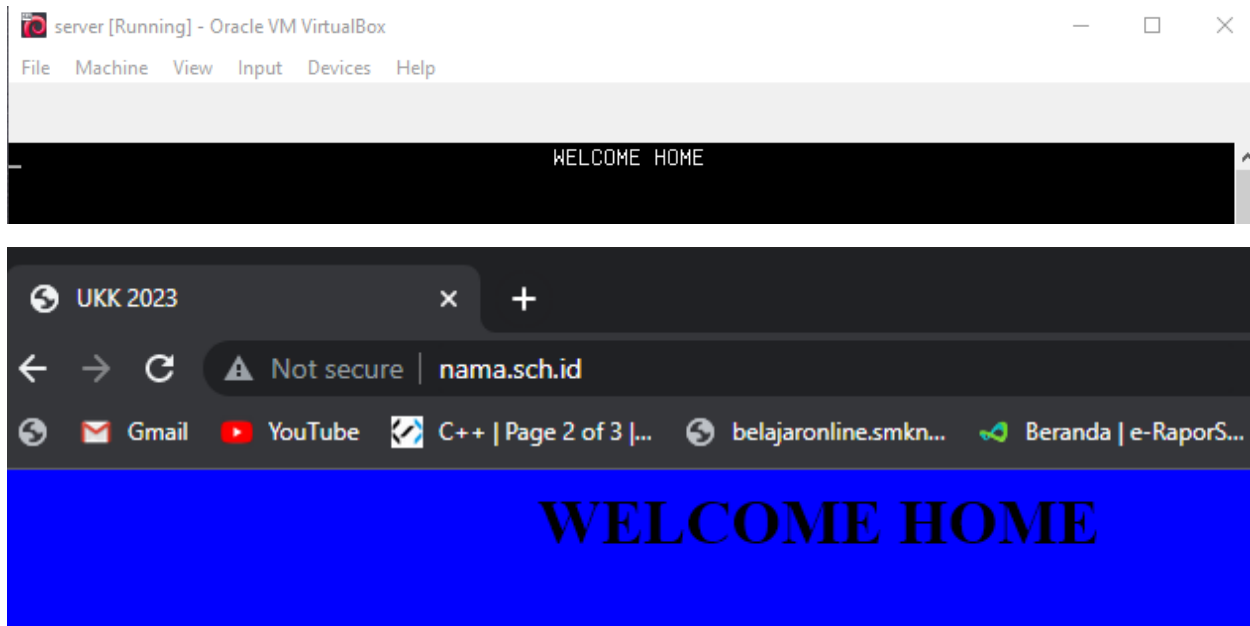
Name:   wordpress.nama.sch.id
Address: 192.168.10.1

root@debian:/etc/bind# nslookup nama.sch.id
Server:          192.168.10.1
Address:         192.168.10.1#53

Name:   nama.sch.id
Address: 192.168.10.1
```

11. Lakukan pengujian ke domain utama dari sisi server dan juga client

```
root@debian:/etc/bind# w3m nama.sch.id
```



12. Buat directory untuk subdomain wordpress, dan masuk ke directory tersebut

```
root@debian:/var/www# mkdir wordpress.nama.sch.id
root@debian:/var/www# ls
html nama.sch.id wordpress.nama.sch.id
```

Download wordpress dengan perintah wget

```
root@debian:/var/www/wordpress.nama.sch.id# wget https://wordpress.org/latest.tar.gz
--2023-02-25 05:49:57-- https://wordpress.org/latest.tar.gz
Resolving wordpress.org (wordpress.org)... 198.143.164.252
Connecting to wordpress.org (wordpress.org)|198.143.164.252|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 22751086 (22M) [application/octet-stream]
Saving to: 'latest.tar.gz'

latest.tar.gz      100%[=====] 21.70M  229KB/s  in 3m 33s
2023-02-25 05:53:32 (104 KB/s) - 'latest.tar.gz' saved [22751086/22751086]
root@debian:/var/www/wordpress.nama.sch.id# ls
latest.tar.gz
```

Unzip file wordpress

```
root@debian:/var/www/wordpress.nama.sch.id# tar -xzf latest.tar.gz _
```

```
root@debian:/var/www/wordpress.nama.sch.id# ls
latest.tar.gz wordpress
```

13. Masuk ke database mariadb ,Kemudian buat database baru dan pengguna dengan hak akses penuh ke database tersebut. Misalnya, perintah berikut membuat database "wordpress" dan pengguna "tkj" dengan sandi "tkj123":

```
MariaDB [(none)]> CREATE DATABASE wordpress;
Query OK, 1 row affected (0.001 sec)
```

```
MariaDB [(none)]> SHOW DATABASES;
+-----+
| Database |
+-----+
| information_schema |
| mysql |
| performance_schema |
| wordpress |
+-----+
4 rows in set (0.001 sec)

MariaDB [(none)]> GRANT ALL ON wordpress.* TO 'tkj'@'localhost' IDENTIFIED BY 'tkj123';
Query OK, 0 rows affected (0.003 sec)

MariaDB [(none)]> FLUSH PRIVILEGES;
Query OK, 0 rows affected (0.001 sec)
```

Kemudian keluar. Pastikan sudah membuat virtualhost untuk subdomainnya.

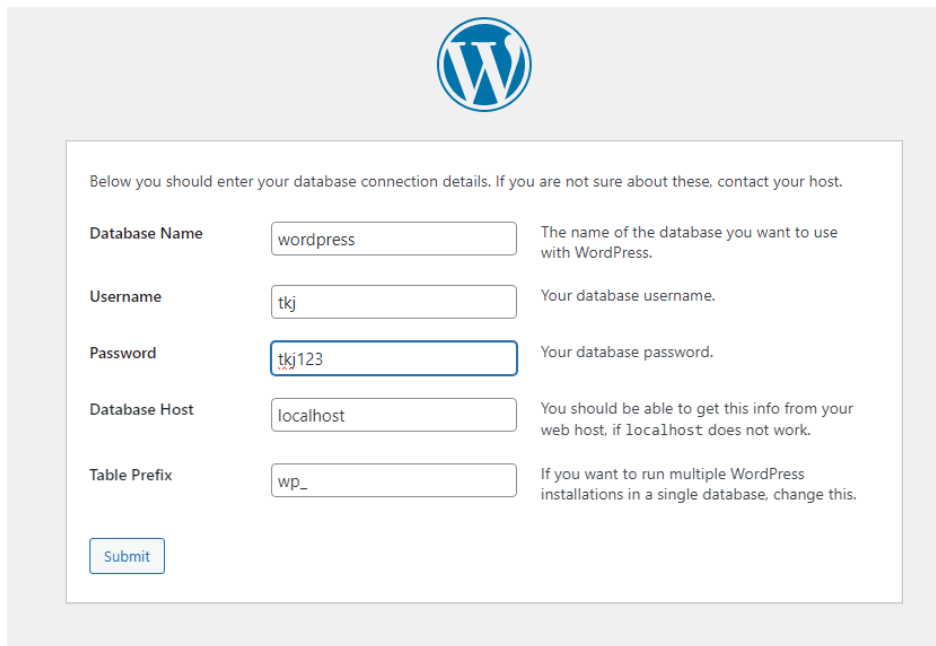
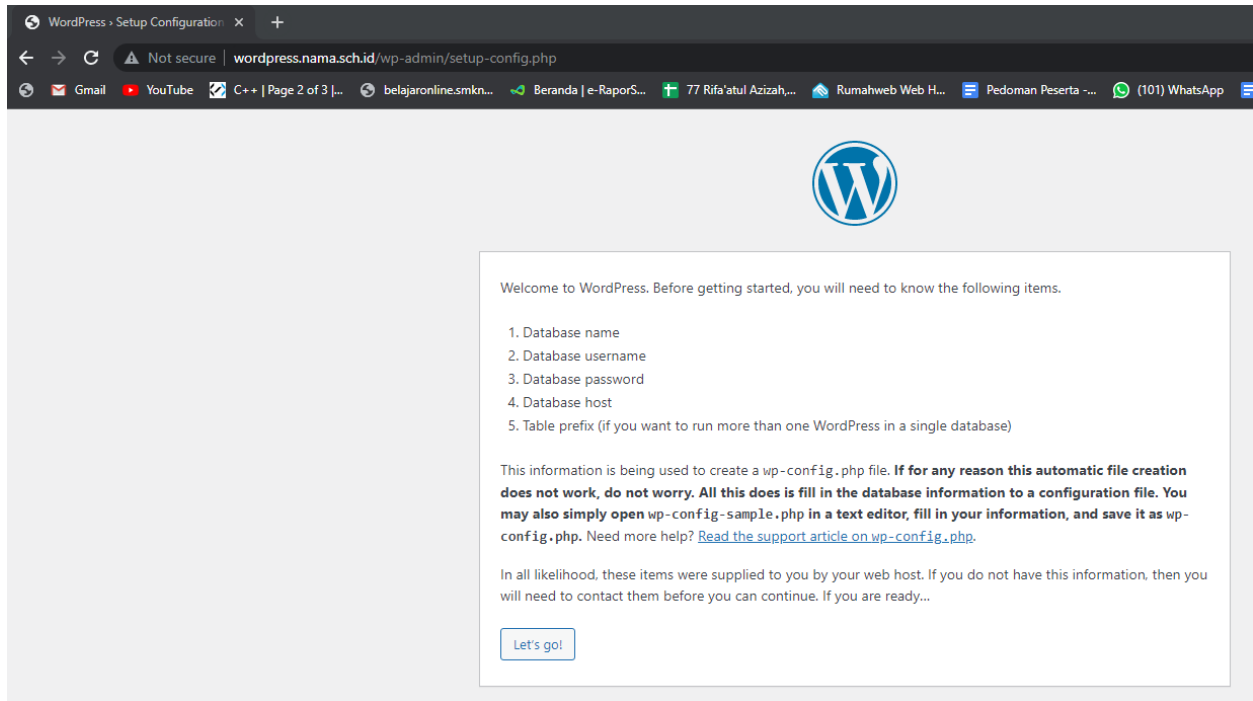
Lakukan pengujian dari sisi client dan sisi server, jika muncul seperti ini tidak perlu khawatir.
Lakukan instalasi atau update php-mysql

Your PHP installation appears to be missing the MySQL extension which is required by WordPress.

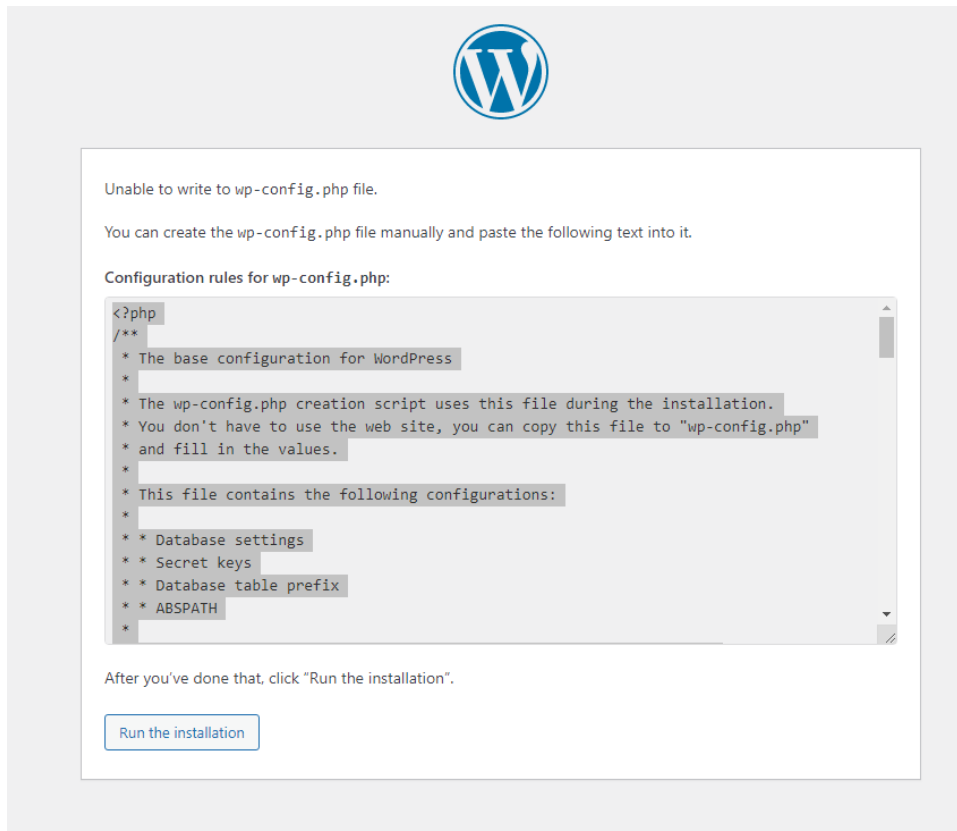
Install php-mysql

```
root@debian:/etc/php/7.4/apache2# apt install php-mysql
```

Reload kembali



Jika Ketika submit muncul error seperti berikut



Lakukan copy file wp-config-sample.php menjadi wp-config.php yang berada pada directory wordpress

```
root@debian:/var/www/wordpress.nama.sch.id/wordpress# cp wp-config-sample.php wp-config.php
```

Kemudian edit file wp-config.php dan tambahkan database secara manual, yaitu

- a. Db_name
- b. Db_user
- c. Db_password

Simpan.

```
root@debian:/var/www/wordpress.nama.sch.id/wordpress# nano wp-config.php
```

```
GNU nano 5.4 wp-config.php *
<?php
/**
 * The base configuration for WordPress
 *
 * The wp-config.php creation script uses this file during the installation.
 * You don't have to use the web site, you can copy this file to "wp-config.php"
 * and fill in the values.
 *
 * This file contains the following configurations:
 *
 * * Database settings
 * * Secret keys
 * * Database table prefix
 * * ABSPATH
 *
 * @link https://wordpress.org/support/article/editing-wp-config-php/
 *
 * @package WordPress
 */

// ** Database settings - You can get this info from your web host ** //
/** The name of the database for WordPress */
define( 'DB_NAME', 'wordpress' );

/** Database username */
define( 'DB_USER', 'tkj' );

/** Database password */
define( 'DB_PASSWORD', 'tkj123' );


/** Database hostname */
define( 'DB_HOST', 'localhost' );
```

Reload Kembali halaman wordpressnya. Setting seperti biasa.

WordPress Installation

Not secure | wordpress.nama.sch.id/wp-admin/install.php

Gmail YouTube C++ | Page 2 of 3 |... belajaronline.smkn... Beranda | e-RaporS... 77 Rifa'atul Azizah,... Rumahweb Web H... Pedoman Peserta -... (101) WhatsApp



Welcome

Welcome to the famous five-minute WordPress installation process! Just fill in the information below and you'll be on your way to using the most extendable and powerful personal publishing platform in the world.

Information needed

Please provide the following information. Do not worry, you can always change these settings later.

Site Title

Username
Usernames can have only alphanumeric characters, spaces, underscores, hyphens, periods, and the @ symbol.

Password
Very weak
Important: You will need this password to log in. Please store it in a secure location.

Confirm Password Confirm use of weak password

Your Email
Double-check your email address before continuing.

Search engine visibility Discourage search engines from indexing this site
It is up to search engines to honor this request.

yuhuuuuu - TKJ LUAR BIASA

Not secure | wordpress.nama.sch.id/?p=5

Gmail YouTube C++ | Page 2 of 3 |... belajaronline.smkn... Beranda | e-RaporS... 77 Rifa'atul Azizah,... Rumahweb Web H... Pedoman Peserta -... (101) WhatsApp Dokumen Briefing... Progate (60) Konfigurasi Ser...

TKJ LUAR BIASA Edit site 1 0 + New Edit Post Howdy, tkj

TKJ LUAR BIASA Sample Page

yuhuuuuu

SELAMAT BELAJAR DAN SEMOGA SUKSES