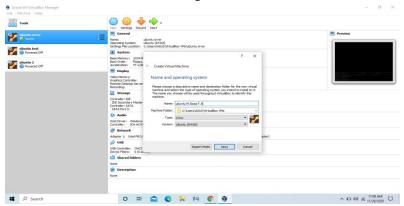
Nama : M.Reza Fadhil Arrafi
NIM : 09011282025047
Kelas : SK A Indralaya
Jurusan : Sistem Komputer

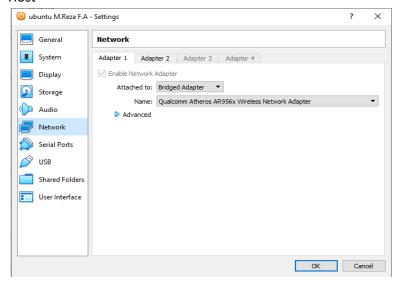
Mata Kuliah : Pengantar Telekomunikasi Dosen Pengempu : Adi Hermansyah, S.KOm., M.T.

Ubuntu Server with Wordpress or HTML by PuTTY (SSH)

- Cara menginstall ubuntu-20.04.1-live-server-amd64
- 1.Hal pertama yang perlu dilakukan yaitu menginstall ubuntu server menggunakan virtual box
 - Klik Icon New untuk membuat Virtual Machine baru. Lakukan Konfigurasi seperti nama machine, RAM, dan virtual storage. Lalu tekan buat.



 Atur jaringan pada pengaturan, lalu Jaringan.Pada Adapter 1 pilih jaringan "Adaptor Hanya-Host"



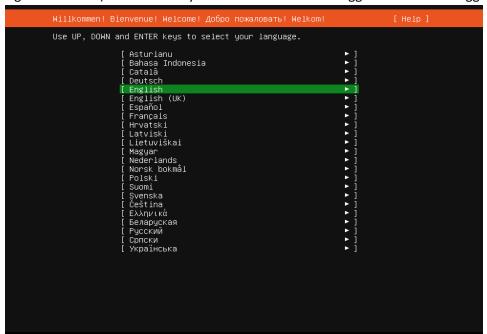
Tekan Start untuk menjalankan virtualboxnya



Mulai Install Ubuntu Server



 Pilih Bahasa ubuntu server
 Pilih bahasa inggris (agar memudahkan proses troubleshooting/terminology yang digunakan sama) karena kebanyakan diskusi internet menggunakan bahasa inggris.



Installer update available
 Pilih continue without updating

```
Installer update available

Version 20.09.1+git1.67496d12 of the installer is now available (20.07.1+git2.5de9df3e is currently running).

You can read the release notes for each version at:

https://github.com/CanonicalLtd/subiquity/releases

If you choose to update, the update will be downloaded and the installation will continue from here.

[ Update to the new installer ]
[ Continue without updating ]
[ Back ]
```

• Keyboar Configuration

```
Keyboard configuration [ Help ]

Please select your keyboard layout below, or select "Identify keyboard" to detect your layout automatically.

Layout: [English (US) ▼ ]

Variant: [English (US) ▼ ]

[Identify keyboard ]
```

Jaringan pada Ubuntu server
 Gunakan jaringan default dari network interfacesnya

```
Network connections [ Help ]

Configure at least one interface this server can use to talk to other machines, and which preferably provides sufficient access for updates.

NAME TYPE NOTES

[ enoos3 eth - DHCPv4 10.0.2.15/24

08:00:127:e0:55f:e2 / Intel Corporation / 82540EM Gigabit Ethernet Controller (PRO/1000 MT Desktop Adapter)

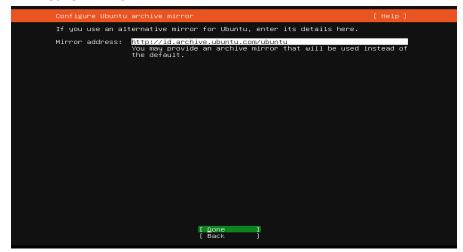
[ Create bond ▶ ]

[ Create bond ▶ ]
```

Pilih Proxy address

Kosongkan,karena tidak ada proxy yang digunakan sehingga nilai dari proxy dibiarkan kosong

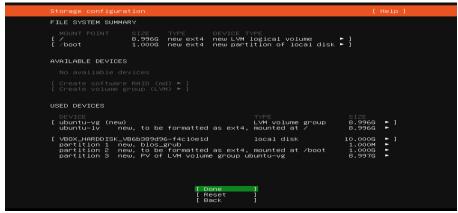
Pilih Network Mirror



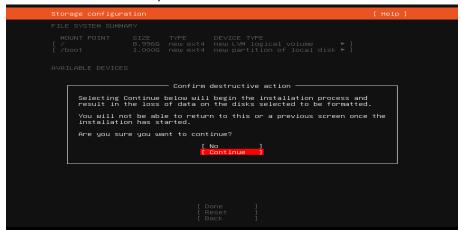
• Guided Storage Configuration

• Storage Configuration

Untuk mengatur mengatur Peyimpanan di ubuntu server



• Pilih continue untuk memproses instalasi



Isi profile User

Masukkan nama user nama akun, nama server

Masukkan nama user,nama akun, nama server, dan password yang nantinya akan digunakan untuk login

Profile setup	[Help]
Enter the username and password you will use to log in to the system. You can configure SSH access on the next screen but a password is still needed for sudo.	
Your name:	reza
Your server's name:	mrfa The name it uses when it talks to other computers.
Pick a username:	arrafi
Choose a password:	*
Confirm your password:	ж
	[Done]
	[Done

Install Open SSH Server

Pastikan mencentang install SSH server agar server dapat diakses



Pilih default feature ubuntu server

Terdapat beberapa package yang secara default akan terinstall

Tunggu Proses Instalasi sampai selesai

```
curtin command block-meta
removing previous storage devices
configuring disk: disk-sda
configuring partition: partition-0
configuring partition: partition-1
configuring partition: partition-2
configuring town wolgroup: lvm_volgroup-0
configuring lvm_partition: lvm_partition-0
configuring vom partition: lvm_partition-0
configuring format: format-1
configuring mount: mount-1
configuring mount: mount-0
writing install sources to disk
running 'curtin extract'
curtin command extract
acquiring and extracting image from cp://media/filesystem
configuring installed system
running 'snap/bin/subiquity.subiquity-configure-run'
running 'snap/bin/subiquity.subiquity-configure-apt
/snap/subiquity/1966/usr/bin/python3 true'
curtin command apt-config
curtin command apt-config
curtin command in-target
running 'curtin curthooks'
curtin command curthooks'
curtin command curthooks'
curtin command spart configuring apt
installing missing packages
configuring alsci service
configuring raid (mdadm) service
installing kernel |
```

Setelah installasi selesai maka lakukan reboot

• Login Ubuntu server

Masukkan username dan password yang telah ditulis pada profil installasi sebelumnya

```
Ubuntu 20.04.1 LTS mrfa tty1
mrfa login:
```

Jika berhasil maka tampilan ubuntu server akan muncul seperti ini

- 2. Mengkonfigurasi SSH pada Ubuntu server
 - Ketikkan \$ "sudo su" kemudian install ssh dengan mengetik " sudo apt-get install ssh"

```
arrafi@mrfa:~$ sudo su
[sudo] password for arrafi:
root@mrfa:/home/arrafi# sudo apt-get install ssh
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following NEW packages will be installed:
    ssh
0 upgraded, 1 newly installed, 0 to remove and 123 not upgraded.
Need to get 5,080 B of archives.
After this operation, 120 kB of additional disk space will be used.
Get:1 http://id.archive.ubuntu.com/ubuntu focal-updates/main amd64 ssh all 1:8.2p1-4ubuntu0.1 [5,080 B)
Fetched 5,080 B in 1s (6,366 B/s)
Selecting previously unselected package ssh.
(Reading database ... 70813 files and directories currently installed.)
Preparing to unpack .../ssh_1%3a8.2p1-4ubuntu0.1_all.deb ...
Unpacking ssh (1:8.2p1-4ubuntu0.1) ...
Setting up ssh (1:8.2p1-4ubuntu0.1) ...
Setting up ssh (1:8.2p1-4ubuntu0.1) ...
```

Mengisi Username dengan user dari server, dan host dengan alamat atau domain server

Setelah itu ketik \$ "sudo apt-install net-tools"

root@mrfa:/home/arrafi# apt install net–tools_

Ketik "ifconfig" untuk melihat IP address kita

```
root@mrfa:/Nome/arrafi# ifconfig
enp0s3: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 192.168.56.101 netmask 255.255.255.0 broadcast 192.168.56.255
    inet6 fe80::a00:27ff:fee0:5fe2 prefixlen 64 scopeid 0x20<link>
    ether 08:00:27:e0:5f:e2 txqueuelen 1000 (Ethernet)
    RX packets 63 bytes 8523 (8.5 KB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 13 bytes 1538 (1.5 KB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

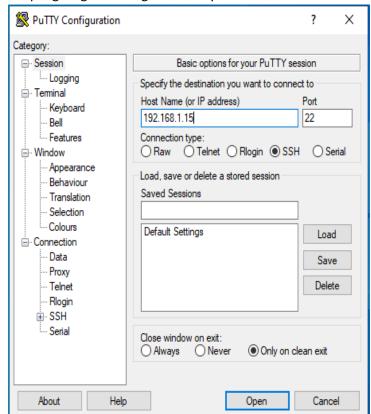
lo: flags=73<UP,L00PBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10<host>
    loop txqueuelen 1000 (Local Loopback)
    RX packets 480 bytes 34320 (34.3 KB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 480 bytes 34320 (34.3 KB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```

Koneksi SSH tanpa key
 Ketikkan \$ "ssh username@host"

Username diisi dengan user dari server, dan host diisi dengan alamat atau domain server

```
enpOs3: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
       inet 192.168.1.15 netmask 255.255.255.0 broadcast 192.168.1.255
       inet6 fe80::a00:27ff:fee0:5fe2 prefixlen 64 scopeid 0x20<link>
       ether 08:00:27:e0:5f:e2 txqueuelen 1000 (Ethernet)
       RX packets 1450 bytes 1971291 (1.9 MB)
       RX errors 0 dropped 0 overruns 0 frame 0
       TX packets 320 bytes 26343 (26.3 KB)
       TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
       inet 127.0.0.1 netmask 255.0.0.0
       inet6 ::1 prefixlen 128 scopeid 0x10<host>
       loop txqueuelen 1000 (Local Loopback)
       RX packets 180 bytes 13712 (13.7 KB)
       RX errors 0 dropped 0 overruns 0 frame 0
       TX packets 180 bytes 13712 (13.7 KB)
       TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
arrafi@mrfa:~$ _
```

• Gunakan IP address yang didapatkan tadi untuk login di aplikasi PuTTy dan Ubuntu harus tetap login agar bisa login ke PuTTy



• Login dengan menggunakan username dan password yang di atur tadi

```
arrafi@mrfa: ~
                                                                                    ×
 * Documentation: https://help.ubuntu.com
 * Management: https://landscape.canonical.com
* Support: https://ubuntu.com/advantage
 System information as of Tue 01 Dec 2020 08:19:18 AM UTC
 System load: 0.01 Processes: 111
Usage of /: 47.1% of 8.79GB Users logged in: 1
Memory usage: 21% IPv4 address for enp0s3: 192.168.1.15
  Swap usage: 0%
  Introducing self-healing high availability clusters in MicroK8s.
   Simple, hardened, Kubernetes for production, from RaspberryPi to DC.
     https://microk8s.io/high-availability
133 updates can be installed immediately.
60 of these updates are security updates.
To see these additional updates run: apt list --upgradable
Last login: Tue Dec 1 08:06:57 2020
arrafi@mrfa:~$
```

Koneksi SSH menggunakan SSH key

• Membuat kunci yang berpasangan dengan mengetik perintah:

• Setelah kunci sudah dibuat, selanjutnya gembok perlu diletakkan pada server

```
arrafi@mrfa:~$ ssh-copy-id arrafi@192.168.56.101
/usr/bin/ssh-copy-id: INFO: Source of key(s) to be installed: "/home/arrafi/.ssh/id_rsa.pub"
/usr/bin/ssh-copy-id: INFO: attempting to log in with the new key(s), to filter out any that are alr eady installed
/usr/bin/ssh-copy-id: INFO: 1 key(s) remain to be installed -- if you are prompted now it is to inst all the new keys
arrafi@192.168.56.101's password:

Number of key(s) added: 1

Now try logging into the machine, with: "ssh 'arrafi@192.168.56.101'"
and check to make sure that only the key(s) you wanted were added.

arrafi@mrfa:~$ ~_
```

Menginstall Wordpress

Setelah itu mendwonload dan mengaktifkan Apache2, Mariadb-Server, Mariadb-client, MySQL, PHP, database, dan Wordpress di Ubuntu server atau PuTTY

```
arrafi@mrfa:~$ sudo apt install apache2 -y_
```

Menginstall Mariadb-server, dan maridadb-client

```
arrafi@mrfa:~$ sudo apt install mariadb–server mariadb–client –y_
```

Jika berhasil maka tampilannya akan seperti ini

```
ika berhasil maka tampilannya akan seperti ini

setting up libconfig-inifiles-perl (3.000002-1) ...

setting up libmysqlclient21:amd64 (8.0.22-oubuntu0.20.04.3) ...

setting up libhtml-tagset-perl (3.20-4) ...

setting up liblup-mediatupes-perl (6.04-1) ...

setting up liblup-mediatupes-perl (6.04-1) ...

setting up libencode-locale-perl (1.05-1) ...

setting up libencode-locale-perl (1.05-1) ...

setting up libencode-locale-perl (1.05-1) ...

setting up socat (1,7.3.3-2) ...

setting up socat (1,7.3.3-2) ...

setting up sacity (1,7.3.3-2) ...

setting up mariadb-server-core-lo.3 (1:10.3.25-Oubuntu0.20.04.1) ...

setting up libitmedate-perl (2.3200-1) ...

setting up libted-tent-core-lo.3 (1:10.3.25-Oubuntu0.20.04.1) ...

setting up libterp-meadkey-perl (2.38-1build1) ...

setting up libterp-meadkey-perl (2.38-1build1) ...

setting up libterp-erl (1.76-2) ...

setting up libterp-erl:amd64 (1.643-1) ...

setting up libterp-erl:amd64 (1.643-1) ...

setting up libdd-mysql-perl:amd64 (4.050-3) ...

setting up libterp-asee-perl (3.72-5) ...

setting up mariadb-server-lo.3 (1:10.3.25-Oubuntu0.20.04.1) ...

setting up mariadb-server-lo.3 (1:10.3.25-Oubuntu0.20.04.1) ...

setting up mariadb-server-lo.3 (1:10.3.25-Oubuntu0.20.04.1) ...

setting up selbntml-pasee-perl (3.72-5) ...

setting up mariadb-server-lo.3 (1:10.3.25-Oubuntu0.20.04.1) ...

setting up selbntml-pasee-perl (3.72-5) ...

setting up mariadb-server-lo.3 (1:10.3.25-Oubuntu0.20.04.1) ...

setting up mariadb-server-lo
             ladb.service.

titing up libhttp-message-perl (6.22-1) ...

titing up libhttp-message-perl (6.22-1) ...

titing up mariadb-client (1:10.3.25-Oubuntu0.20.04.1) ...

titing up libhtml-template-perl (2.97-1)

titing up libhtml-template-perl (2.97-1)

titing up mariadb-server (1:10.3.25-Oubuntu0.20.04.1) ...

titing up libcgi-fast-perl (1:2.15-1) ...

tocessing triggers for systemd (245.4-4ubuntu3.2) ...

tocessing triggers for man-db (2.9.1-1) ...

trafi@mrfa:~$
```

Lalu,untuk memulai system mariadb,ketikkan "sudo systemctl start mariadb"

```
arrafi@mrfa:~$ sudo systemctl start mariadb
arrafi@mrfa:~$ sudo systemctl status mariadb
• mariadb.service – MariaDB 10.3.25 database server
Loaded: loaded (/lib/systemd/system/mariadb.service; enabled; vendor preset: enabled)
Active: active (running) since Tue 2020–12–01 08:35:28 UTC; 4min 43s ago
        Docs: man:mysqld(8)
Docs: man:mysqld(8)
https://mariadb.com/kb/en/library/systemd/
Main PID: 3251 (mysqld)
Status: "Taking your SQL requests now..."
Tasks: 31 (limit: 1074)
Memory: 66.0M
                 CGroup: /system.slice/mariadb.service
  Dec 01 08:35:29 mrfa /etc/mysql/debian–start[3289]: information_schema
Dec 01 08:35:29 mrfa /etc/mysql/debian-start[3289]: information_schema

Dec 01 08:35:29 mrfa /etc/mysql/debian-start[3289]: mysql

Dec 01 08:35:29 mrfa /etc/mysql/debian-start[3289]: performance_schema

Dec 01 08:35:29 mrfa /etc/mysql/debian-start[3289]: Phase 6/7: Checking and upgrading tables

Dec 01 08:35:29 mrfa /etc/mysql/debian-start[3289]: Processing databases

Dec 01 08:35:29 mrfa /etc/mysql/debian-start[3289]: information_schema

Dec 01 08:35:29 mrfa /etc/mysql/debian-start[3289]: performance_schema

Dec 01 08:35:29 mrfa /etc/mysql/debian-start[3289]: Phase 7/7: Running 'FLUSH PRIVILEGES'

Dec 01 08:35:29 mrfa /etc/mysql/debian-start[3289]: DK

Dec 01 08:35:29 mrfa /etc/mysql/debian-start[3362]: Triggering myisam-recover for all MyISAM tables

Lines 1-22/22 (END)
lines 1-22/22 (END)
```

Menginstall mysql secure dengan mengetikkan "sudo mysql secure installation

```
Arrafi@mrfa:~$ sudo mysql_secure_installation

NOTE: RUNNING ALL PARTS OF THIS SCRIPT IS RECOMMENDED FOR ALL MariaDB SERVERS IN PRODUCTION USE! PLEASE READ EACH STEP CAREFULLY!

In order to log into MariaDB to secure it, we'll need the current password for the root user. If you've just installed MariaDB, and you haven't set the root password yet, the password will be blank, so you should just press enter here.

Enter current password for root (enter for none):
OK, successfully used password, moving on...

Setting the root password ensures that nobody can log into the MariaDB root user without the proper authorisation.

You already have a root password set, so you can safely answer 'n'.

Change the root password? [Y/n] y
New password:
Re-enter new password:
Re-enter new password:
Password updated successfully!
Reloading privilege tables..

... Success!

By default, a MariaDB installation has an anonymous user, allowing anyone to log into MariaDB without having to have a user account created for them. This is intended only for testing, and to make the installation go a bit smoother. You should remove them before moving into a production environment.

Remove anonymous users? [Y/n] _
```

- Menginstall PHP dengan mengetikkan "sudo apt install php -y" arrafi@mrfa:~\$ sudo apt install php -y
- Menginstall wget dengan mengetikkan "sudo apt install wget -y arrafi@mrfa: "\$ sudo apt install wget -y
 - Selanjutnya,kita akan menginstall Wordpress dengan Mengetikkan wget https://wordpress.org/laters.zip

 Menginstall unzip dengan mengetikkan "sudo apt install unzip -y" arrafi@mrfa:~\$ sudo apt install unzip -y

```
arrafi@mrfa:~$ unzip latest.zip _
```

 Memasukkan cd wordpress dan html Dengan memasukkan perintah:

Cd wordpress/

Sudo cp -r * /var/www/html/

Cd /var/www/html/

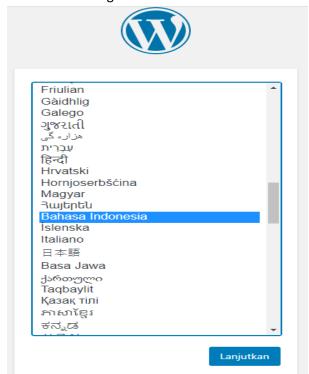
```
arrafi@mrfa:~$ cd wordpress/
arrafi@mrfa:~/wordpress$ ls
index.php
                                                           wp-load.php
                                                                             wp-signup.php
license.txt
                                                           wp-login.php
                 wp-blog-header.php
                                       wp-cron.php
                                                                             wp-trackback.php
                                                                             xmlrpc.php
                wp-comments-post.php wp-includes
readme.html
                                                           wp-mail.php
wp-activate.php wp-config-sample.php wp-links-opml.php wp-settings.php
arrafi@mrfa:~/wordpress$ sudo cp -r * /var/www/html/
arrafi@mrfa:~/wordpress$ cd /var/www/html/
arrafi@mrfa:/var/www/html$ ls
index.html wp-activate.php
                                   wp-config-sample.php wp-links-opml.php wp-settings.php
index.php
                                                                             wp-signup.php
                                                          wp-load.php
license.txt wp-blog-header.php
                                   wp-cron.php
                                                          wp-login.php
                                                                              wp-trackback.php
readme.html wp-comments-post.php
                                                          wp-mail.php
                                                                             xmlrpc.php
arrafi@mrfa:/var/www/html$ sudo rm –rf index.html
arrafi@mrfa:/var/www/html$ ls
index.php
                                                           wp-load.php
                                                                             wp-signup.php
license.txt
                 wp-blog-header.php
                                       wp-cron.php
                                                           wp-login.php
                                                                             wp-trackback.php
readme.html
                 wp-comments-post.php
                                                           wp-mail.php
                                                                             xmlrpc.php
wp-activate.php wp-config-sample.php wp-links-opml.php wp-settings.php
arrafi@mrfa:/var/www/html$ _
```

Selanjutnya,menginstall php-mysql php-cgi php-cli dan php-gd
 Dengan perintah "sudo apt install php-mysql php-cgi php-cli php-gd -y "

```
arrafi@mrfa:/var/www/html$ sudo apt install php-mysql php-cgi php-cli php-gd -y
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
fontconfig-config fonts-dejavu-core libfontconfig1 libgd3 libjbig0 libjpeg-turbo8 libjpeg8
libtiff5 libwebp6 libxpm4 php7.4-cgi php7.4-gd php7.4-mysql
Suggested packages:
libgd-tools php-pear
The following NEW packages will be installed:
fontconfig-config fonts-dejavu-core libfontconfig1 libgd3 libjbig0 libjpeg-turbo8 libjpeg8
libtiff5 libwebp6 libxpm4 php-cgi php-cli php-gd php-mysql php7.4-cgi php7.4-gd php7.4-mysql
0 upgraded, 17 newly installed, 0 to remove and 126 not upgraded.
Need to get 3,368 kB of anchives.
After this operation, 15.8 MB of additional disk space will be used.
Get:1 http://id.archive.ubuntu.com/ubuntu focal/main amd64 fonts-dejavu-core all 2.37-1 [1,041 kB]
17% [1 fonts-dejavu-core 700 kB/1,041 kB 67%]
```

 Merestart system apache2 dan mengecek keseluruhan ip Dengan perintah Sudo systemctl restart apache2
Sudo chown –R www-data:www-data /var/www/html/
Ip a

 Selanjutnya kita masuk ke web google atau mesin pencari lainnya,gunakan ip yg di dapatkan tadi untuk masuk kedalam wordpress.saat sudah berhasil pilih bahasa,continue, dan diminta mengisi database



Selamat datang di WordPress. Sebelum mulai, kami memerlukan beberapa informasi mengenai basis datanya. Anda harus mengetahui beberapa item ini sebelum melanjutkan.

1. Nama basis data
2. Nama pengguna basis data
3. Sandi database
4. Host basis data
5. Prefiks Tabel (jika Anda ingin menjalankan lebih dari satu WordPress pada satu basis data)

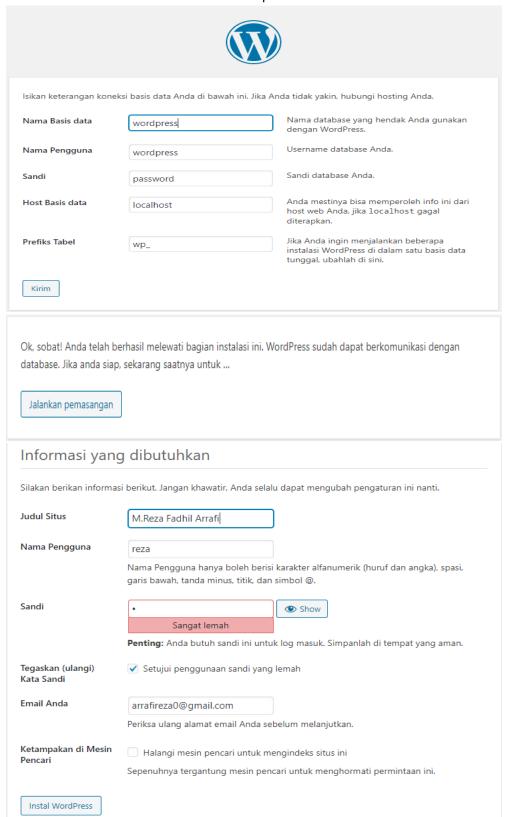
Kami akan menggunakan informasi ini untuk membuat sebuah file wp-config.php. Jika karena hal tertentu proses pembuatan file otomatis ini gagal, tak perlu khawatir. Semua proses ini hanya untuk mengisikan informasi database ke dalam sebuah file konfigurasi. Anda juga bisa membuka file wp-config-sample.php dengan sebuah editor teks, mengisikan informasi tsb secara manual, kemudian menyimpannya dengan judul wp-config.php. Perlu bantuan lagi? Kami sudah menyiapkannya.

Biasanya, item berikut ini disiapkan untuk Anda oleh Host Web Anda. Jika Anda tidak memiliki informasi tersebut, maka kami sarankan Anda untuk menghubungi mereka sebelum Anda melanjutkan. Jika Anda telah siap...



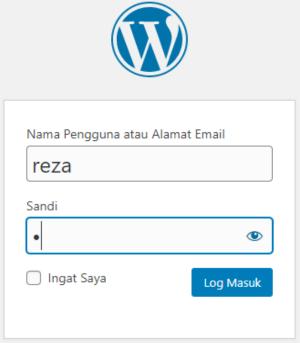
Kembali lagi ke ubuntu server untuk mengisi database
 Dengan perintah sudo mysql –u root -p

 Setelah berhasil kembali lagi ke wordpress dan mengisi database sesuai dengan yang diisi di Ubuntu server dan menekan install wordpress



• Jika data telah masuk dan dipersilahkan untuk log in dengan akn yang telah di buat





• Setelah login,maka terlihatlah tampilan wordpress yang telah di buat

