# PENGANTAR TELEKOMINUKASI UBUNTU SERVER 20.04 SSH, PUTTY, AND WORDPRESS



### **DISUSUN OLEH:**

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PROGRAM STUDI SISTEM KOMPUTER
FAKULTAS ILMU KOMPUTER
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#### A. Install Ubuntu 20.04 Server Di Vm Virtualbox

Bahan:

- File .osi Ubuntu 20.04 Server
- Software VM Virtualbox

Cara Install:



#### 2. Pilih New

Lalu atur Name and Operating System seperti berikut ini:

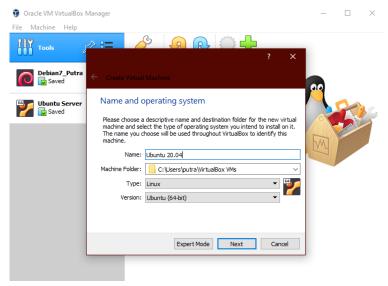
• Nama = Ubuntu 20.04

• Folder = Default

• Type = Linux

• Version = Ubuntu (64-bit)

#### Klik Next



Setelah Next, Muncul Setting dan atur seperti contoh dibawah ini

• Memory Size = 1024 MB

• Hard Disk = Create a virtual hardisk now

Hard Disk file type = VDI (Virtual Disk Image)

• Storage = Dynamite allocated

• File Location = Default

• Size = 10.00 GB

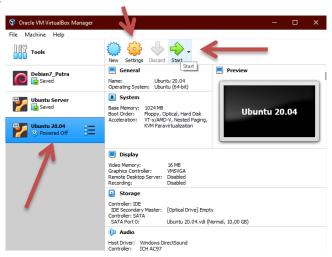
Klik Create

## 3. Klik Setting pada Ubuntu 20.04

Untuk network di ubah ke Bridge Adapter, klik Ok

#### 4. Jalankan Virtual Machine Ubuntu 20.04

Klik Start



### 5. Pilih file .osi Ubuntu 20.04 Server yang sebelumnya sudah di download.

Klik Start dan tunggu beberapa saat.

Please select a virtual optical disk file or a physical optical drive containing a disk to start your new virtual machine from.

The disk should be suitable for starting a computer from and should contain the operating system you wish to install on the virtual machine if you want to do that now. The disk will be ejected from the virtual drive automatically next time you switch the virtual machine off, but you can also do this yourself if needed using the Devices menu.

| Start | Cancel | Can

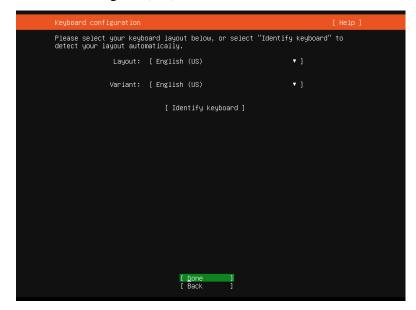
### 6. Pilihan Bahasa

Disini akan dipakai English, Tekan Enter

## 7. Konfigurasi Keyboard

Default, Klik Done

- Layout = English (US)
- Variant = English (US)

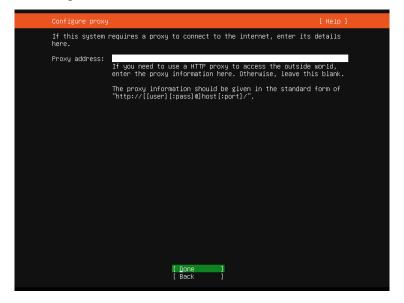


## 8. Network Connection

Klik Continue Without network

## 9. Konfigurasi Proxy

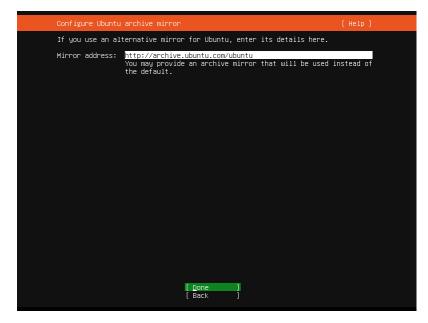
Biarkan kosong, Klik Done



## 10. Konfigurasi Ubuntu Archieve Mirror

Mirror Address = <a href="http://archieve.ubuntu.com/ubuntu">http://archieve.ubuntu.com/ubuntu</a>

Klik Done



## 11. Guided Storage Konfigurasi

Default "Use an entire disk" Klik Done

```
Guided storage configuration [Help]

Configure a guided storage layout, or create a custom one:

(X) Use an entire disk

[VBOX_HARDDISK_VBb42ddfc8-308d9ef5 local disk 10.000G ▼]

[X] Set up this disk as an LVM group

[] Encrypt the LVM group with LUKS

Passphrase:

Confirm passphrase:

() Custom storage layout

[Done ]
[Back ]
```

## 12. Storage Konfigurasi

Klik Done

```
FILE SYSTEM SUMMARY

MOUNT POINT SIZE TYPE DEVICE TYPE

[ / boot 1.000G new ext4 new LVM logical volume | ]

[ / boot 1.000G new ext4 new partition of local disk | ]

AVAILABLE DEVICES

No available devices

[ Create software RAID (md) | ]
[ Create volume group (LVM) | ]

USED DEVICES

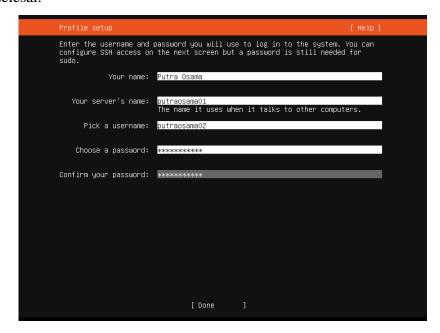
DEVICES

DEVICE | TYPE | SIZE | SIZE
```

### 13. Profile Setup

Isikan Nama, Host, Username, dan Password anda, klik Done.

Username dan Password harus diingat untuk login setelah proses installasi selesai.



## 14. SSH Setup

Centang (X) Install OpenSSH server, klik Done

```
SSH Setup [ Help ]

You can choose to install the OpenSSH server package to enable secure remote access to your server.

[X] Install OpenSSH server

Import SSH identity: [ No ▼ ]
You can import your SSH keys from Github or Launchpad.

Import Username:

[X] Allow password authentication over SSH

[Done ]
[Back ]
```

### 15. Tunggu Proses Instalasi selesai

Setelah selesai, klik Reboot Now

```
Installation complete!

Finished install!

running '/snap/bin/subiquity.subiquity-configure-apt
/snap/subiquity/1966/usr/bin/python3 false'
curtin command apt-config
curtin command apt-config
curtin command curthooks'
curtin command curthooks
configuring apt configuring apt
installing missing packages
configuring raid (mdadm) service
installing kernel
setting up swap
apply networking config
writing etc/fstab
configuring multipath
updating packages on target system
configuring target system bootloader
installing grub to target devices
finalizing installation
running 'curtin hook'
curtin command hook
executing late commands
final system configuration
configuring cloud-init
installing openssh-server
restoring apt configuration

[ View full log ]
[ Reboot Now ]
```

#### 16. Setelah proses Reboot selesai

Tekan Enter. Lalu akan diminta login menggunakan Username dan Password yang telah di atur di Profile Setup sebelumnya, tekan Enter

```
Ubuntu 20.04.1 LTS putraosama01 tty1

putraosama01 login: putraosama02
Password:
Welcome to Ubuntu 20.04.1 LTS (GNU/Linux 5.4.0-42-generic x86_64)

* Documentation: https://help.ubuntu.com
* Management: https://landscape.canonical.com
* Support: https://lubuntu.com/advantage

System information as of Sun 29 Nov 2020 04:19:48 AM UTC

System load: 0.1 Memory usage: 18% Processes: 98

Usage of /: 41.1% of 8.79G8 Swap usage: 0% Users logged in: 0

0 updates can be installed immediately.
0 of these updates are security updates.

Failed to connect to https://changelogs.ubuntu.com/meta-release-lts. Check your Internet connection or proxy settings

Last login: Sun Nov 29 04:18:50 UTC 2020 on tty1
To run a command as administrator (user "root"), use "sudo ⟨command⟩".
See "man Sudo_root" for details.
putraosama02@putraosama01:~$
```

#### 17. Selesai

#### B. Konfigurasi SSH

#### Bahan:

- Ubuntu 20.04 Server pada VM Virtualbox
- Koneksi Internet

#### Langkah-langkah:

### 1. Install paket OpenSSH

Perintah nya sebagau berikut:

\$ sudo apt-get update

\$ sudo apt-get install openssh-server

\$ sudo apt install openssh-client

Ketik dan tekan Enter satu per satu perintah tersebut

```
putraosama02@putraosama01:~$ sudo apt-get update
[sudo] password for putraosama02:
Hit:1 http://archive.ubuntu.com/ubuntu focal InRelease
Get:2 http://archive.ubuntu.com/ubuntu focal-updates InRelease [114 kB]
Get:3 http://archive.ubuntu.com/ubuntu focal-backports InRelease [101 kB]
Get:4 http://archive.ubuntu.com/ubuntu focal-security InRelease [109 kB]
Get:5 http://archive.ubuntu.com/ubuntu focal/restricted amd64 Packages [22.0 kB]

putraosama02@putraosama01:~$ sudo apt-get install openssh-server
Reading package lists... Done
Building dependency tree
Reading state information... Done
openssh-server is already the newest version (1:8.2p1-4ubuntu0.1).
0 upgraded, 0 newly installed, 0 to remove and 134 not upgraded.
putraosama02@putraosama01:~$ sudo apt install openssh-client
Reading package lists... Done
Building dependency tree
Reading state information... Done
openssh-client is already the newest version (1:8.2p1-4ubuntu0.1).
openssh-client set to manually installed.
0 upgraded, 0 newly installed, 0 to remove and 134 not upgraded.
putraosama02@putraosama01:~$
```

### 2. Dapatkan IP Address

Perintah

\$ sudo apt install net-tools

\$ ifconfig

IP Address didapatkan = 192.168.43.74

```
putraosamaO2@putraosamaO1:~$ sudo apt install net-tools
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following NEW packages will be installed:
    net-tools
O upgraded, 1 newly installed, O to remove and 134 not upgraded.
Need to get 196 kB of archives.
After this operation, 864 kB of additional disk space will be used.
Get:1 http://archive.ubuntu.com/ubuntu focal/main amd64 net-tools amd64 1.60+git2O18O6
untul [196 kB]
Fetched 196 kB in 3s (70.9 kB/s)
Selecting previously unselected package net-tools.
(Reading database ... 70799 files and directories currently installed.)
Preparing to unpack .../net-tools_1.60+git2O18O626.aebd88e_1ubuntu1) ...
iSetting up net-tools (1.60+git2O18O626.aebd88e_1ubuntu1) ...
iSetting up net-tools (1.60+git2O18O626.aebd88e_1ubuntu1) ...
Processing triggers for man-db (2.9.1-1) ...
putraosamaO2@putraosamaO1:~$ ifconfig
enpOs3: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    int 192.168.43.74 netmask 255.255.255.0 broadcast 192.168.43.255
    int (6 fe80::a00:27ff:fedd:61a8 prefixien 64 scopeid 0x2O<link>
    ether 08:00:27:dd:61:a8 txqueuelen 1000 (Ethernet)
    RX packets 14445 bytes 18908821 (18.9 MB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 5883 bytes 424414 (424.4 kB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```

#### 3. File Konfigurasi SSH

Dapaat dilihat dengan perintah

\$ sudo nano /etc/ssh/sshd\_config

```
GNU nano 4.8
                                                                    /etc/ssh/sshd config
  This is the sshd server system—wide configuration file. See sshd_config(5) for more information.
  This sshd was compiled with PATH=/usr/bin:/bin:/usr/sbin:/sbin
  The strategy used for options in the default sshd_config shipped with OpenSSH is to specify options with their default value where possible, but leave them commented. Uncommented options override the
Include /etc/ssh/sshd_config.d/*.conf
 AddressFamily any
 ListenAddress 0.0.0.0
ListenAddress ::
#HostKey /etc/ssh/ssh_host_rsa_key
#HostKey /etc/ssh/ssh_host_ecdsa_key
Y Ciphers and keying
YRekeyLimit default none
 SyslogFacility AUTH
LogLevel INFO
                     ^O Write Out
^R Read File
                                                                                                Justify
To Spel:
    Get Help
                                                 Where Is
                                                  Replace
```

### C. Remote dengan Terminal dan PUTTY

Terninal

Ketik perintah pada terminal

\$ ssh user@host

Yes

Lalu akan diminta masukkan password. Jika masuk ketampilan awal login, maka sudah berhasil tehubung.

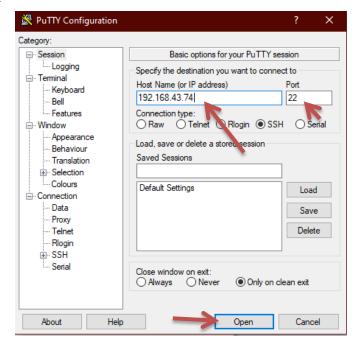
#### • PUTTY (Windows)

Download Software PUTTY pada windows. Setelah itu install/run.

#### 1. Buka PUTTY

Masukan IP Address pada server Ubuntu dan Port 22 (Default / disesuaikan pada file konfigurasi SSH di server Ubuntu.

#### Klik Opem



#### 2. Muncul Jendela login as

Ketik/masukkan username dan password sama seperti saat login pada server Ubuntu.

Jika tampilan sama seperti saat login pada server, maka PUTTY sudah terhubung dengan server. 192.168.43.74

```
putraosama01:~

login as: putraosama02
putraosama02@192.168.43.100's password:
Welcome to Ubuntu 20.04.1 LTS (GNU/Linux 5.4.0-42-generic x86_64)

* Documentation: https://landscape.canonical.com
* Management: https://landscape.canonical.com
* Support: https://ubuntu.com/advantage

System information as of Tue 01 Dec 2020 01:02:34 PM UTC

System load: 0.0 Processes: 110
Usage of /: 42.8% of 8.79GB Users logged in: 1
Memory usage: 21% IPv4 address for enp0s3: 192.168.43.74
Swap usage: 0%
```

### D. Koneksi SSH dengan SSH key

#### 1. Membuat SSH Keys

Ketik perintah pada terminal

\$ ssh-keygen -t rsa

Lalu Enter seterusnya sampai di dapat The Key's randomart image is

#### 2. Salin SSH keys ke Server

Perintah

\$ ssh-copy-id user@ipserver

Yes

Lalu akan diminta masukkan password, isi dengan password user kita.

Jika muncul number of key(s) added 1 maka sudah berhasil dan kedepannya jika ingin masuk server tidak perlu memasukkan password

```
putraosama02@putraosama01:~$ ssh-copy-id putraosama02@192.168.43.74
/usr/bin/ssh-copy-id: INFO: Source of key(s) to be installed: "/home/putraosama02/.ssh/id_r
The authenticity of host '192.168.43.74 (192.168.43.74)' can't be established.
ECDSA key fingerprint is SHA256:VZycIRO9CQwFtM57phc5jsrvK9Fkb2MMGk78XnTa/Ms
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
/usr/bin/ssh-copy-id: INFO: attempting to log in with the new key(s), to filter out any the
eady installed
/usr/bin/ssh-copy-id: INFO: 1 key(s) remain to be installed -- if you are prompted now it :
all the new keys
putraosama02@192.168.43.74's password:

Number of key(s) added: 1

Now try logging into the machine, with: "ssh 'putraosama02@192.168.43.74'"
and check to make sure that only the key(s) you wanted were added.

putraosama02@putraosama01:~$
```

#### E. Membuat aplikasi Wordpress pada Ubuntu 20.04 Server

Bahan

- Terminal
- Lamp (Apache, Mariadb, MySQL, PHP)
- Wordpress

#### 1. Install Apache, Mariadb, MySQL, PHP

Perintah install Apache

\$ sudo apt install apache2 -y

```
putraosama02@putraosama01:~$ sudo apt install apache2 —y
Reading package lists... Done
Building dependency tree
Reading state information... Done
Suggested packages:
    apache2—doc apache2—suexec—pristine | apache2—suexec—custom www—browser
The following NEW packages will be installed:
    apache2
0 upgraded, 1 newly installed, 0 to remove and 134 not upgraded.
Need to get 95.5 kB of archives.
After this operation, 541 kB of additional disk space will be used.
Get:1 http://archive.ubuntu.com/ubuntu focal—updates/main amd64 apache2 amd64 2.
5 kB]
Fetched 95.5 kB in 5s (19.7 kB/s)
Selecting previously unselected package apache2.
(Reading database ... 71355 files and directories currently installed.)
Preparing to unpack .../apache2_2.4.41—4ubuntu3.1_amd64.deb ...
Unpacking apache2 (2.4.41—4ubuntu3.1) ...
Setting up apache2 (2.4.41—4ubuntu3.1) ...
```

Perintah install Mariadb

\$ sudo apt install mariadb-server mariadb-client –y

```
putraosamaO2@putraosamaO1:~$ sudo apt install mariadb—server mariadb—client —y
Reading package lists... Done
Building dependency tree
Reading state information... Done
```

\$ sudo systemctl start mariadb

\$ sudo mysql\_secure\_installation

#### Perintah install PHP

\$ sudo apt-get install php

```
putraosamaO2@putraosamaO1:~$ sudo apt–get install php
Reading package lists... Done
Building dependency tree
Reading state information... Done
php is already the newest version (2:7.4+75).
php set to manually installed.
 upgraded, 0 newly installed, 0 to remove and 134 not upgraded.
```

#### 2. Download File Wordpress

Buka Web <a href="https://id.wordpress.org/download/">https://id.wordpress.org/download/</a>

Copy link download = https://id.wordpress.org/latest-id\_ID.zip

Buka terminal, ketik perintah

\$ sudo apt install wget -y

\$ wget https://id.wordpress.org/latest-id\_ID.zip

```
putraosama02@putraosama01:~$ sudo apt install wget -y
Reading package lists... Done
Building dependency tree
Reading state information... Done
wget is already the newest version (1.20.3-1ubuntu1).
wget set to manually installed.
0 upgraded, 0 newly installed, 0 to remove and 134 not upgraded.
putraosama02@putraosama01:~$ wget http://id.wordpress.org/latest-id_ID.zip
--2020-12-01 17:31:41-- http://id.wordpress.org/latest-id_ID.zip
Resolving id.wordpress.org (id.wordpress.org) | 198.143.164.252
Connecting to id.wordpress.org (id.wordpress.org) | 198.143.164.252 | :80... connected.
HTTP request sent, awaiting response... 301 Moved Permanently
Location: https://id.wordpress.org/latest-id_ID.zip [following]
--2020-12-01 17:31:46-- https://id.wordpress.org/latest-id_ID.zip
Connecting to id.wordpress.org (id.wordpress.org/latest-id_ID.zip
Connecting to id.wordpress.org (id.wordpress.org/latest-id_ID.zip
Connecting to id.wordpress.org (id.wordpress.org) | 198.143.164.252 | :443... connected.
HTTP request sent, awaiting response... 200 0K
Length: 14693464 (14M) [application/zip]
Saving to: 'latest-id_ID.zip'
             latest-id_ID.zip
                                                                                                                                                                                                                                                   17%[====>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2.41M 18.2KB/s
```

Setelah itu ketik perintah lagi

\$ sudo apt install unzip -y

\$ unzip latest-id\_ID.zip

Lalu pindahkan ke direktori /var/www/html/

\$ cd wordpress/

/wordpress\$ sudo cp -r \* /var/www/html

/wordpress\$ cd /var/www/html/

/var/www/html\$ sudo rm -rf index.html

```
putraosama02@putraosama01:~$ cd wordpress/
putraosama02@putraosama01:~/wordpress$ 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-antivate.php wp-cominis-post.php wp-links-opml.php wp-sett putraosama02@putraosama01:~/wordpress$ sudo cp -r * /var/www/html putraosama02@putraosama01:~/wordpress$ cd /var/www/html/putraosama02@putraosama01:/var/www/html$ ls
                                                                      wp-settings.php
                                          wp-config-sample.php wp-links-opml.php
                                                                                             wp-settings.php
index.html
              wp–activate.php
index.php
                                                                      wp-load.php
                                                                                             wp-signup.php
license.txt wp-blog-header.php
                                                                      wp-login.php
                                                                                             wp-trackback.php
                                          wp-cron.php
 readme.html wp-comments-post.php
                                                                     wp-mail.php
                                                                                             xmlrpc.php
putraosama02@putraosama01:/var/www/html$ sudo rm –rf index.html
putraosamaO2@putraosamaO1:/var/www/html$ ls
                                                                       wp-load.php
index.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
putraosamaO2@putraosamaO1:/var/www/html$
```

#### Setelah itu

/var/www/html\$ sudo apt install php-mysql php-cgi php-cli php-gd -y

```
E: Unable to locate package php-vgi
putraosama02@putraosama01:/var/www/html$ sudo apt install php-mysql php-cgi php-cli -y
Reading package lists... Done
Building dependency tree
Reading state information... Done
php-mysql is already the newest version (2:7.4+75).
php-mysql set to manually installed.
Suggested packages:
php-pear
```

/var/www/html\$ sudo systemctl restart apache2

/var/www/html\$ chown -R www-data:www-data /var/www/html

/var/www/html\$ sudo chown -R www-data:www-data /var/www/html

#### 3. Buka Browser (Windows)

Masukan IP Server kita tadi = 192.168.43.73

Enter, lalu akan masuk ke wordpress

Irikan katarangan karr	oksi basis data Anda di bawah ini	. Jika Anda tidak yakin, hubungi hosting Anda.
Nama Basis data	wordpress	Nama database yang hendak Anda gunakan
Nama Pengguna	nama-pengguna	dengan WordPress.  Username database Anda.
Sandi	sandi	Sandi database Anda.
Host Basis data	localhost	Anda mestinya bisa memperoleh info ini dari host web Anda, jika localhost gagal diterapkan.
Prefiks Tabel	wp_	Jika Anda ingin menjalankan beberapa instalasi WordPress di dalam satu basis data

Ketik perintah pada terminal

/var/www/html\$ sudo mysql –u root –p

MariaDB [(none)] create database wordpress

MariaDB [(none)] create user "putraosama02"@"%" identified by "password";

MariaDB [(none)]grant all privilages on wordpress.\* to

"putraosama02"@"%";

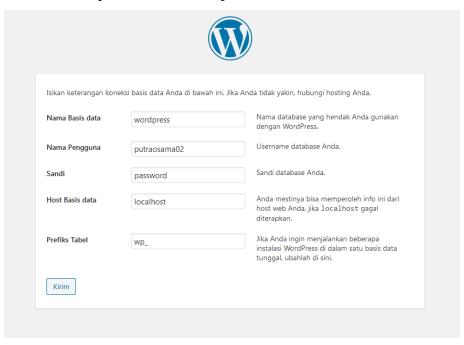
Didapat/dibuat sebagai berikut

Database = wordpress

Username = putraosaam02

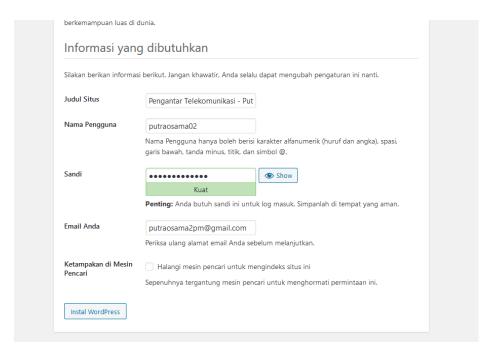
Password = password

Lalu masukan pada browser wordpress tadi, kirim.

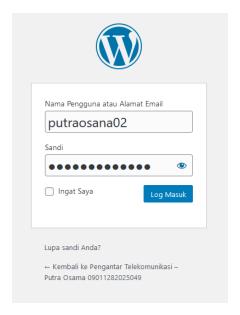


Setelah itu isikan informasi yang diperlukan,

Klik Install Wordpress

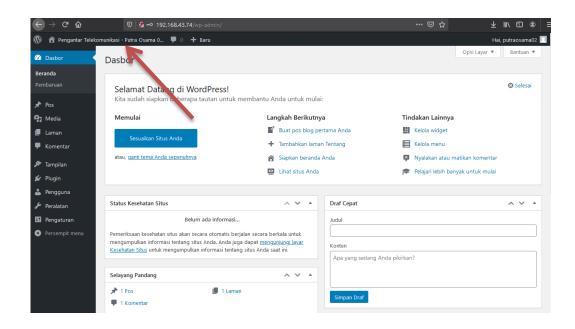


Lalu kita bisa langsung login dengan username dan password yang sudah Dibuat

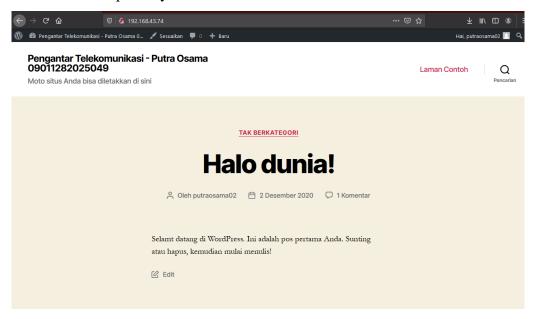


Lalu akan masuk ke lama 192.168.43.74/wp-admin/

Untuk melihat tampulan web bisa di klik Judul web pada pojok kiri atas.



## Berikut tampilan nya



Selesai