

Laporan Hands On
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**Membuat Virtual Machine pada Cloudmatika
dan Instalasi pada Linux dengan PuTTY**

Cloud Sore
Kelompok 5:

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Pembuatan *virtual machine* (New Server) dilakukan dengan mengakses <https://cloudmatika.com>, Kemudian Log In dengan menggunakan user ID: Cloudsore5 dan Password: "Digitalent:2018".

Setelah sukses masuk cloudmatika, maka akan tampak beberapa tab, yaitu:

- A. *Home* : ringkasan kegiatan
- B. *Cloud* : untuk membuat server
- C. *Help & Support*: Sebagai basis pengetahuan dan media bantu jika ada pertanyaan umum lebih lanjut.

Tahapan membuat *Cloud*:

1. Klik menu *Cloud* lalu klik *New server*, lalu masukkan data berikut :

Server name : cloudsore5

Server configuration : minimal (karena trial)

I will manage the OS kernel : centang (untuk membuat container atau VM, jika VM maka checklist)

OS : free linux

number of IPv4 addresses : 1

Lalu klik next

OS : ubuntu 16.04

Gambar 1. Pembuatan server di Cloudmatika.

https://cloudmatika.com/workspace.html?bw_id=1aa3d4d7c219475a1b850e5477ec8d57

CloudMATIKA

Subscriber: kelompok lima (Account ID: 1021451)
Subscription: CloudServer VDC (test.com: 1041917) Logout

Home Cloud Help & Support

New Server

Please specify the server settings.

Total Estimated Price: 334708.0000 \$ per month

General

Server Name *
This name will be the cloud ID and hostname for the server. The value may contain letters, digits, and hyphens and must not exceed 63 characters.

Description

Backup Schedule

Create the server with a custom hostname

☐ Specify custom hostname

Server Configuration

Preset Configurations: MINIMAL

CPU Cores: 32

CPU Frequency: 2400 MHz

RAM: 512 MB

Disk Space: 20 GB

I will manage the OS kernel: ☒

Operating System: Free Linux

Public Network Settings

Register in domain:

Bandwidth: 100,000 Kbit/s

Number of IPv4 Addresses: 1

Allow to configure the network settings from within the server: ☐
Note that you will be able to configure all network settings, except for IP addresses.

*Required fields

Next Cancel

Gambar 2. Pemilihan OS.

The screenshot shows the 'New Server' page on the CloudMatika website. The browser address bar displays the URL: https://cloudmatika.com/workspace.html?bw_id=e888799403b1e53d454d0c7ea5047361. The page header includes the CloudMatika logo, navigation links (Home, Cloud, Help & Support), and user information (Subscriber: kelompok lima (Account ID: 1021451), Subscription: CloudServer VDC (test.com): 1041917, Logout). The main content area is titled 'New Server' and includes a sub-header 'Please choose the operating system.' Below this, there is a form with a dropdown menu for 'Edition' showing options: ubuntu-16.04, ubuntu-16.04 (selected), debian-7.0, centos-6, scientificlinux-6, debian-8.0, ubuntu-14.04, and centos-7. There are 'Back' and 'Next' buttons at the bottom of the form.

Gambar 3. Ringkasan detail pembuatan server baru.

The screenshot shows the 'New Server' page on the CloudMatika website. The browser address bar displays the URL: https://cloudmatika.com/workspace.html?bw_id=b73fcb468.... The page header includes the CloudMatika logo, navigation links (Home, Cloud, Help & Support), and user information (Subscriber: kelompok lima (Account ID: 1021451), Subscription: CloudServer VDC (test.com): 1041917, Logout). The main content area is titled 'New Server' and includes a sub-header 'New Server Summary'. Below this, there is a table with the following details:

Name	cloudsore5a
Description	
Backup Schedule	No backup
CPU Cores	1
CPU Frequency	2,000 MHz
RAM	512 MB
Disk Space	20 GB
Disk Storage	Network Storage
Bandwidth	100,000 Kbit/s
Technology	Virtual Machine
Operating System	Free Linux
Number of IPv4 Addresses	1
Edition	ubuntu-16.04
Architecture	x86_64
Language	English

Below the table, there is a section titled 'Estimated Price' with the following details:

Estimated Price	304280.0000 \$ per month
Tax Total	30428.0000 \$
Total Estimated Price	334708.0000 \$ per month

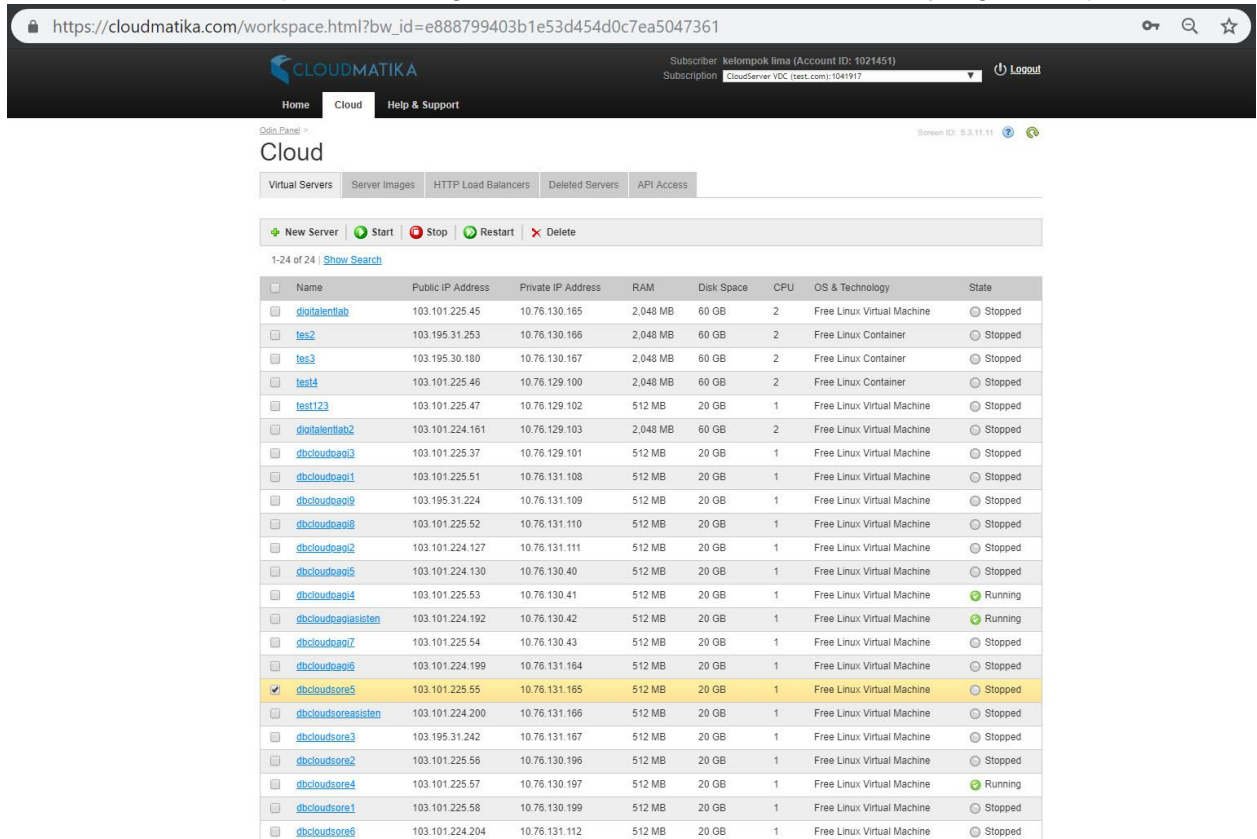
Below the price section, there is a section titled 'Start upon creation' with a checkbox labeled 'Start after creation' which is checked.

At the bottom of the page, there are three buttons: 'Back', 'Finish', and 'Cancel'.

✓ New server creation is in progress.

2. Akan muncul tampilan *list cloud*, klik *dbcloudsore5*, untuk mengganti *password* klik *Change password* dan selesai. Maka selanjutnya nama server akan tampil seperti pada gambar berikut.

Gambar 3. Tampilan keterangan Nama Server, IP Publik dan VM yang sudah jadi.

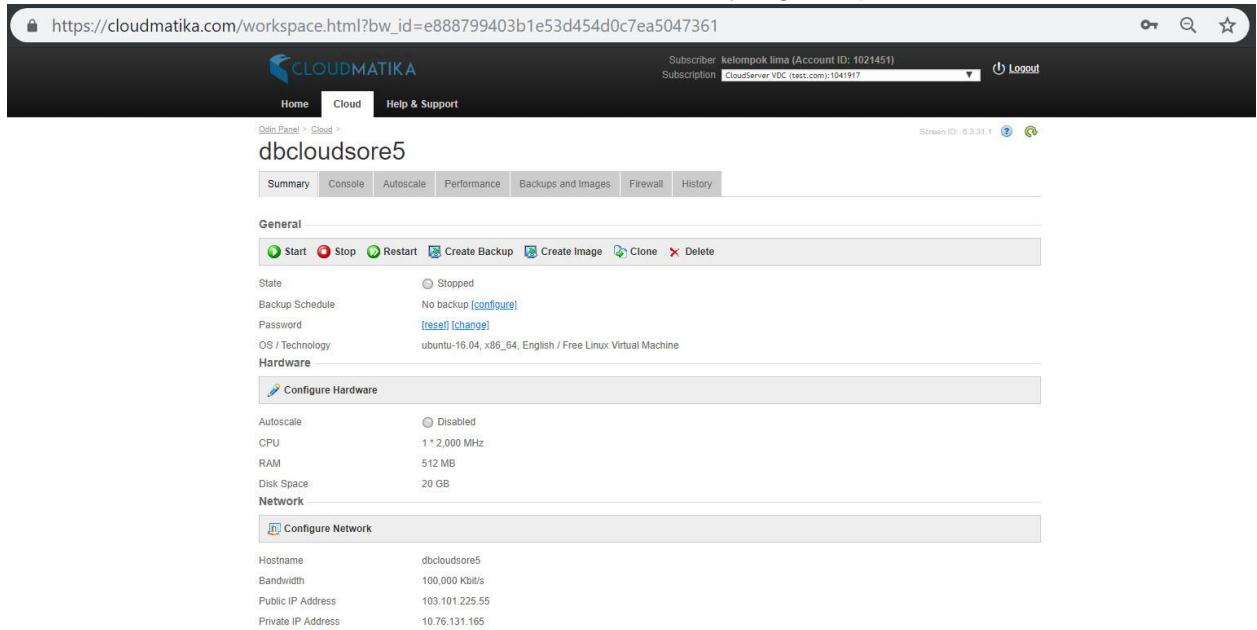


The screenshot shows the CloudMatika dashboard with a list of virtual servers. The table below represents the data shown in the image.

Cloud									
Virtual Servers Server Images HTTP Load Balancers Deleted Servers API Access									
New Server Start Stop Restart Delete									
1-24 of 24 Show Search									
<input type="checkbox"/>	Name	Public IP Address	Private IP Address	RAM	Disk Space	CPU	OS & Technology	State	
<input type="checkbox"/>	dipalantab	103.101.225.45	10.76.130.165	2,048 MB	60 GB	2	Free Linux Virtual Machine	<input type="radio"/>	Stopped
<input type="checkbox"/>	tes2	103.195.31.253	10.76.130.166	2,048 MB	60 GB	2	Free Linux Container	<input type="radio"/>	Stopped
<input type="checkbox"/>	tes3	103.195.30.180	10.76.130.167	2,048 MB	60 GB	2	Free Linux Container	<input type="radio"/>	Stopped
<input type="checkbox"/>	test4	103.101.225.46	10.76.129.100	2,048 MB	60 GB	2	Free Linux Container	<input type="radio"/>	Stopped
<input type="checkbox"/>	test123	103.101.225.47	10.76.129.102	512 MB	20 GB	1	Free Linux Virtual Machine	<input type="radio"/>	Stopped
<input type="checkbox"/>	dipalantab2	103.101.224.161	10.76.129.103	2,048 MB	60 GB	2	Free Linux Virtual Machine	<input type="radio"/>	Stopped
<input type="checkbox"/>	dbcloudsore3	103.101.225.37	10.76.129.101	512 MB	20 GB	1	Free Linux Virtual Machine	<input type="radio"/>	Stopped
<input type="checkbox"/>	dbcloudsore1	103.101.225.51	10.76.131.108	512 MB	20 GB	1	Free Linux Virtual Machine	<input type="radio"/>	Stopped
<input type="checkbox"/>	dbcloudsore8	103.195.31.224	10.76.131.109	512 MB	20 GB	1	Free Linux Virtual Machine	<input type="radio"/>	Stopped
<input type="checkbox"/>	dbcloudsore9	103.101.225.52	10.76.131.110	512 MB	20 GB	1	Free Linux Virtual Machine	<input type="radio"/>	Stopped
<input type="checkbox"/>	dbcloudsore2	103.101.224.127	10.76.131.111	512 MB	20 GB	1	Free Linux Virtual Machine	<input type="radio"/>	Stopped
<input type="checkbox"/>	dbcloudsore5	103.101.224.130	10.76.130.40	512 MB	20 GB	1	Free Linux Virtual Machine	<input type="radio"/>	Stopped
<input type="checkbox"/>	dbcloudsore4	103.101.225.53	10.76.130.41	512 MB	20 GB	1	Free Linux Virtual Machine	<input checked="" type="radio"/>	Running
<input type="checkbox"/>	dbcloudsoreasisten	103.101.224.192	10.76.130.42	512 MB	20 GB	1	Free Linux Virtual Machine	<input checked="" type="radio"/>	Running
<input type="checkbox"/>	dbcloudsore7	103.101.225.54	10.76.130.43	512 MB	20 GB	1	Free Linux Virtual Machine	<input type="radio"/>	Stopped
<input type="checkbox"/>	dbcloudsore6	103.101.224.199	10.76.131.164	512 MB	20 GB	1	Free Linux Virtual Machine	<input type="radio"/>	Stopped
<input checked="" type="checkbox"/>	dbcloudsore5	103.101.225.55	10.76.131.165	512 MB	20 GB	1	Free Linux Virtual Machine	<input type="radio"/>	Stopped
<input type="checkbox"/>	dbcloudsoreasisten	103.101.224.200	10.76.131.166	512 MB	20 GB	1	Free Linux Virtual Machine	<input type="radio"/>	Stopped
<input type="checkbox"/>	dbcloudsore3	103.195.31.242	10.76.131.167	512 MB	20 GB	1	Free Linux Virtual Machine	<input type="radio"/>	Stopped
<input type="checkbox"/>	dbcloudsore2	103.101.225.56	10.76.130.196	512 MB	20 GB	1	Free Linux Virtual Machine	<input type="radio"/>	Stopped
<input type="checkbox"/>	dbcloudsore4	103.101.225.57	10.76.130.197	512 MB	20 GB	1	Free Linux Virtual Machine	<input checked="" type="radio"/>	Running
<input type="checkbox"/>	dbcloudsore1	103.101.225.58	10.76.130.199	512 MB	20 GB	1	Free Linux Virtual Machine	<input type="radio"/>	Stopped
<input type="checkbox"/>	dbcloudsore6	103.101.224.204	10.76.131.112	512 MB	20 GB	1	Free Linux Virtual Machine	<input type="radio"/>	Stopped

Jika di klik pada server name-nya terdapat beberapa menu tab seperti Console, Autoscale, Performance, Backups and Images, Firewall dan History.

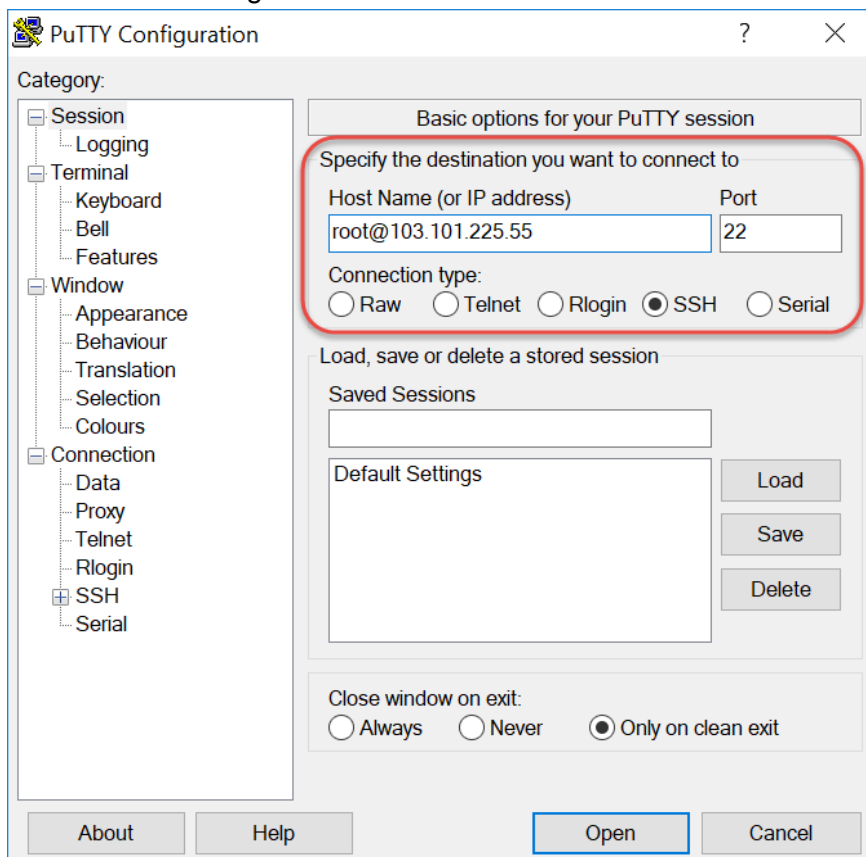
Gambar 4. Data umum dan menu tab yang ada pada VM.



Selanjutnya adalah proses instalasi LEMP yang terdiri dari Nginx (E), MySQL (M), PHP (P) di Linux melalui PuTTY.

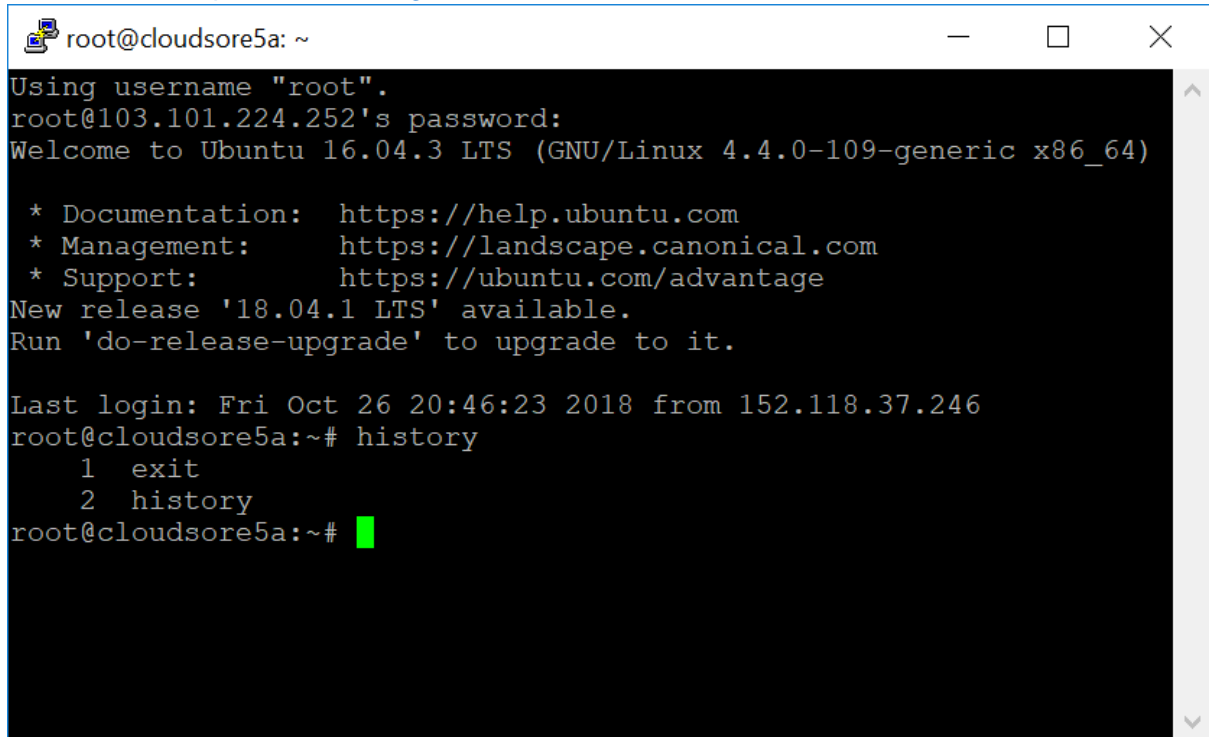
3. SSH ke Server

Akses PuTTY dengan Hostname : root@103.101.225.55



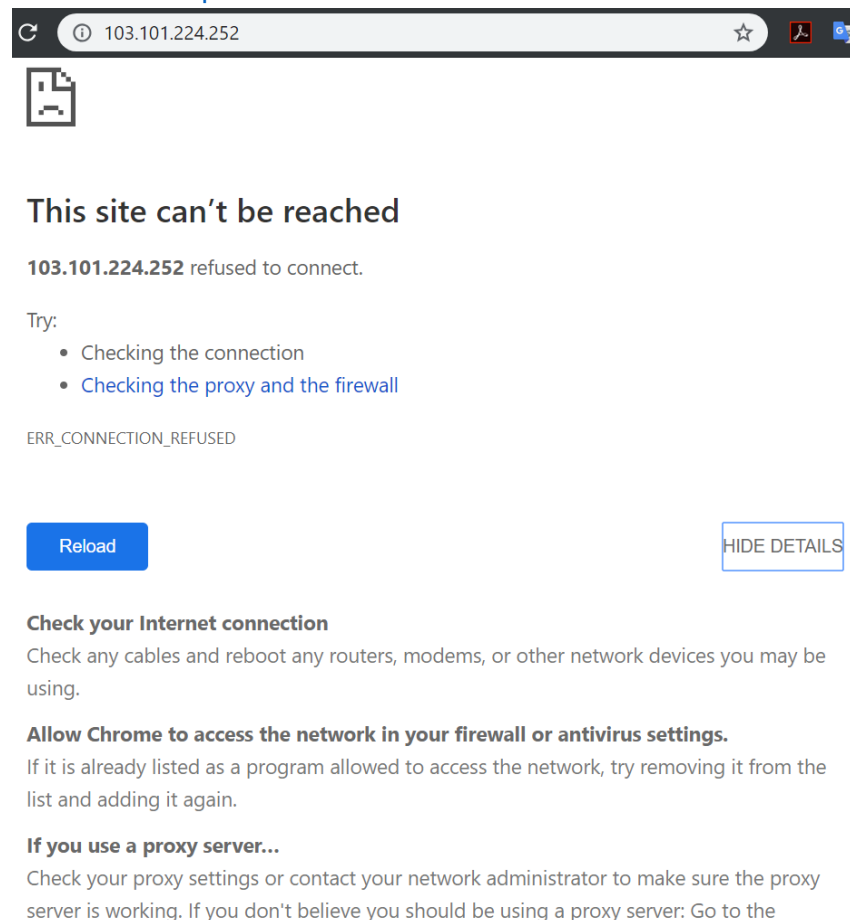
Kemudian login dengan nama server dan password yang telah dibuat pada Cloudmatika sebelumnya.

Gambar 6. Tampilan setelah login.



```
root@cloudsore5a: ~  
Using username "root".  
root@103.101.224.252's password:  
Welcome to Ubuntu 16.04.3 LTS (GNU/Linux 4.4.0-109-generic x86_64)  
  
* Documentation:  https://help.ubuntu.com  
* Management:    https://landscape.canonical.com  
* Support:        https://ubuntu.com/advantage  
New release '18.04.1 LTS' available.  
Run 'do-release-upgrade' to upgrade to it.  
  
Last login: Fri Oct 26 20:46:23 2018 from 152.118.37.246  
root@cloudsore5a:~# history  
  1  exit  
  2  history  
root@cloudsore5a:~#
```

Gambar 7. Tampilan web ketika awal dibuat.



4. Masukkan *syntax* :

apt-get update -> untuk *update list* aplikasi apa saja yang ada di dalamnya ke repository.

apt-get install nginx -> untuk me-*install webserver*

Masukan *public ip adress* di *browser* -> untuk melihat *webserver*, pada *webserver* muncul tulisan *Welcome to nginx*.

(After this operation, 9,785 kB of additional disk space will be used.

Do you want to continue? [Y/n])

Gambar 8. Setelah update dan instal nginx.



Welcome to nginx!

If you see this page, the nginx web server is successfully installed and working. Further configuration is required.

For online documentation and support please refer to nginx.org.
Commercial support is available at nginx.com.

Thank you for using nginx.

5. *Install MySQL* : untuk me-*install* MySQL pada VM

apt-get install mysql-server-> setelah ter-*install* masukkan *password* baru.

Untuk membuka MySQL -> mysql -u root mysql. Bisa juga untuk mengganti *password*.

(After this operation, 202 MB of additional disk space will be used.

Do you want to continue? [Y/n])

6. *Install PHP* untuk *processing*

apt-get install php-fpm php-mysql -> disk akan terpakai 14.5MB. Prosesnya lama karena mengambil data dari yang lainnya (misal Ubuntu)

(After this operation, 14.5 MB of additional disk space will be used.

Do you want to continue? [Y/n])

nano /etc/php/7.0/fpm/php.ini -> muncul file tulisan lalu ubah baris dengan isi
;cgi.fix_pathinfo=1 menjadi cgi.fix_pathinfo=0. Lalu save dan exit.

systemctl restart php7.0-fpm -> untuk me-restart agar system berjalan sesuai dengan yang sudah diubah.

Untuk mengecek dapat juga dengan cara -> Stop php7.0-fpm start php7.0-fpm

7. Konfigurasi Nginx untuk menggunakan PHP Processor : untuk mendaftarkan aplikasi di nginx.

Hapus tagar agar yang awalnya hanya command agar dapat dibaca oleh system.

*untuk melihat daftar perintah apa saja yang sudah dilakukan -> *history*. Untuk memakai ulang -> !(nomor)

8. Buat file PHP untuk tes konfigurasi: *script* untuk menampilkan versi dari PHP

9. Install phpMyAdmin :

apt-get install phpmyadmin -> Muncul konfigurasi PHP MyAdmin, pilih Apache, lalu masukkan password.

ln -s /usr/share/phpmyadmin /var/www/html -> untuk *link*

chmod 755 /var/www/html

systemctl restart php7.0-fpm

akses [http://public ip address/phpmyadmin](http://public_ip_address/phpmyadmin) -> muncul *dashboard* phpmyadmin untuk administrasi MySQL.