- Setelah itu, klik import

- Tunggu proses impornya selesai, apabila sudah selesai, maka akan muncul Virtual Machine yang baru

5. Install *features*

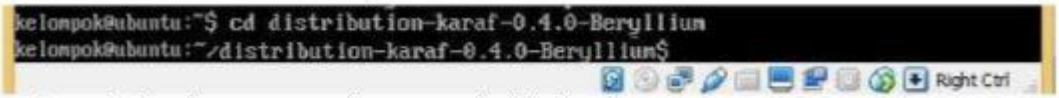
- Install *features* di Open DayLight

⌘

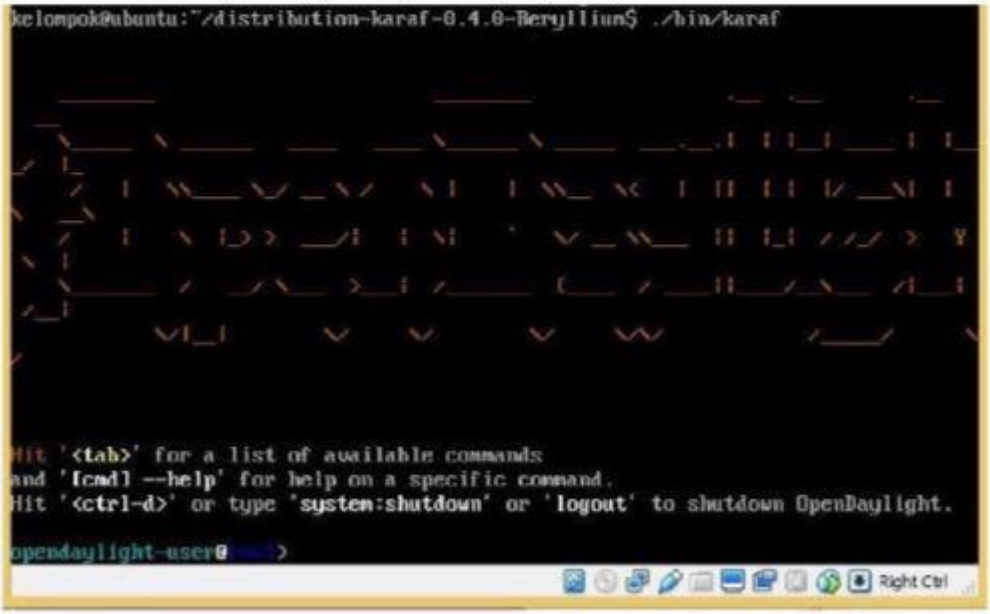
6. Download Mininet VM Image

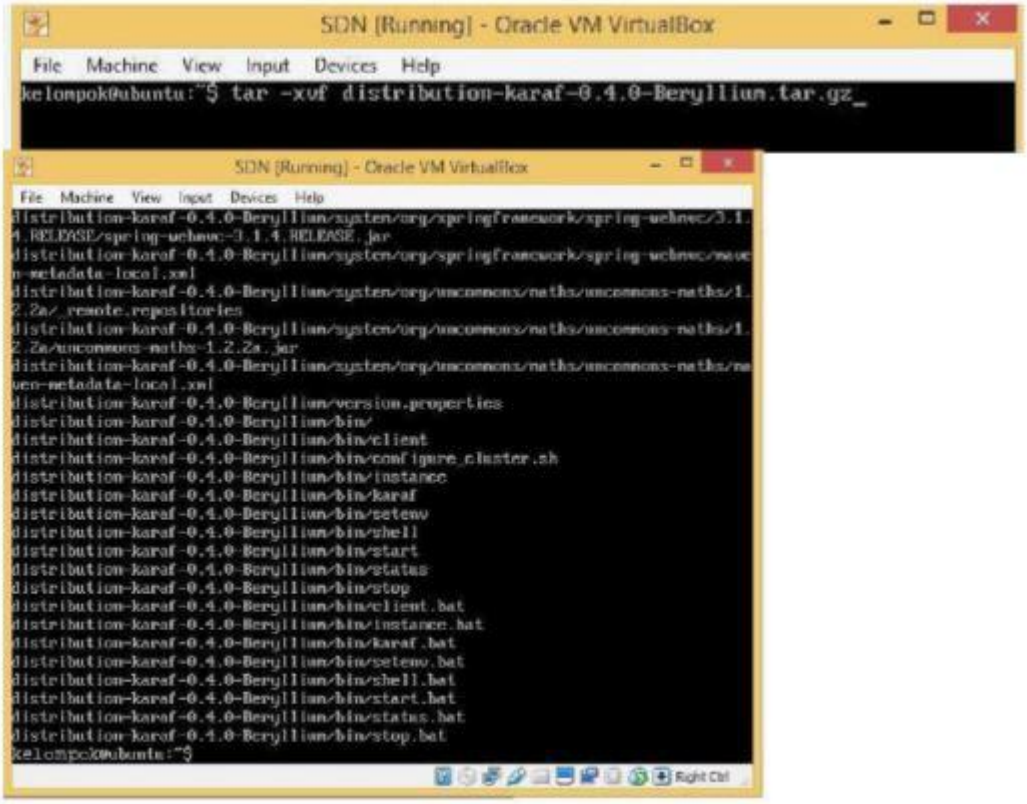
- Buka situs https://mininet.org/download untuk mendownload mininet.
- Extract file yang sudah didownload. Didalam folder tersebut terdapat 2 file, yang akan kita gunakan adalah file yang berformat .ovf
- Di virtualbox, klik file, lalu klik Import Appliance.
- Klik icon folder yang disebelah kanan, lalu carilah file mininet. Jika sudah dapat, klik next

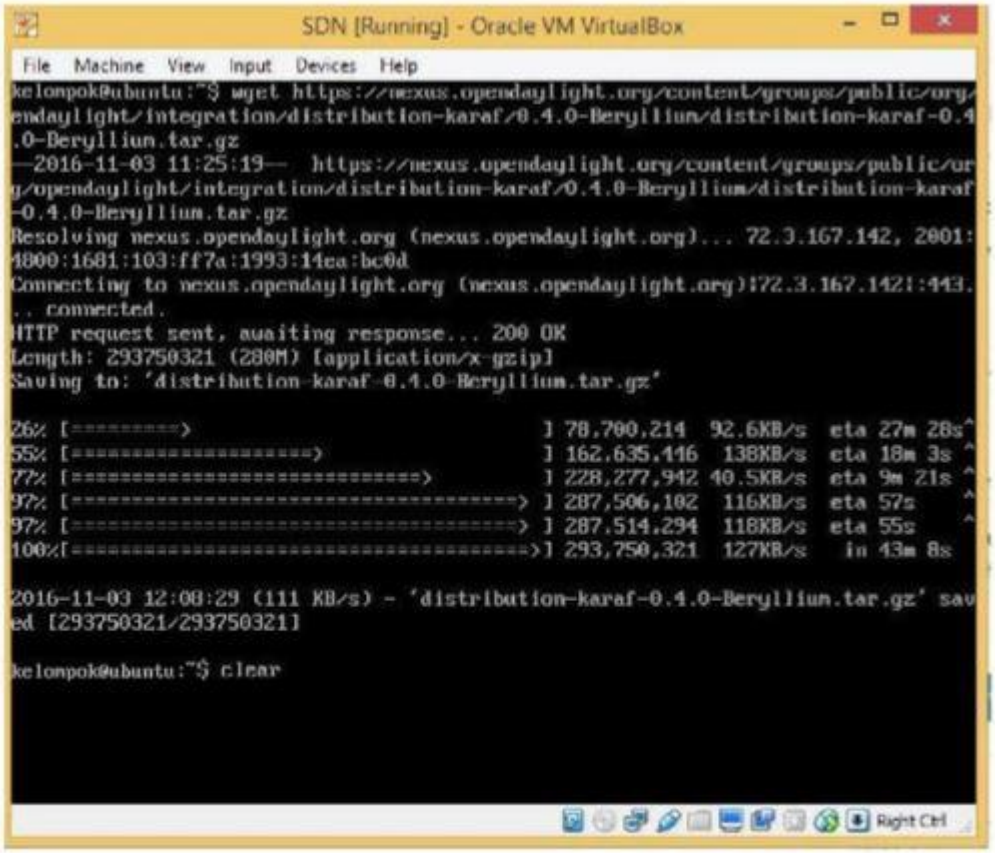
- Setelah itu, masuk kedalam direktorinya dengan menggunakan perintah cd distribution-karaf-0.4.0-Beryllium



- Jalankan dengan mengetikkan perintah ***./bin/karaf***





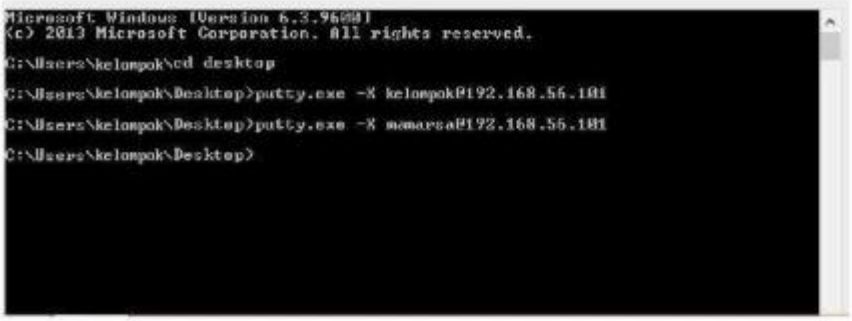


➢ Ketika sudah berhasil di download, extract file tar OpenDayLight tadi, dengan menggunakan perintah *tar –xvf distribution-karaf-0.4.0-Beryllium.tar.gz*

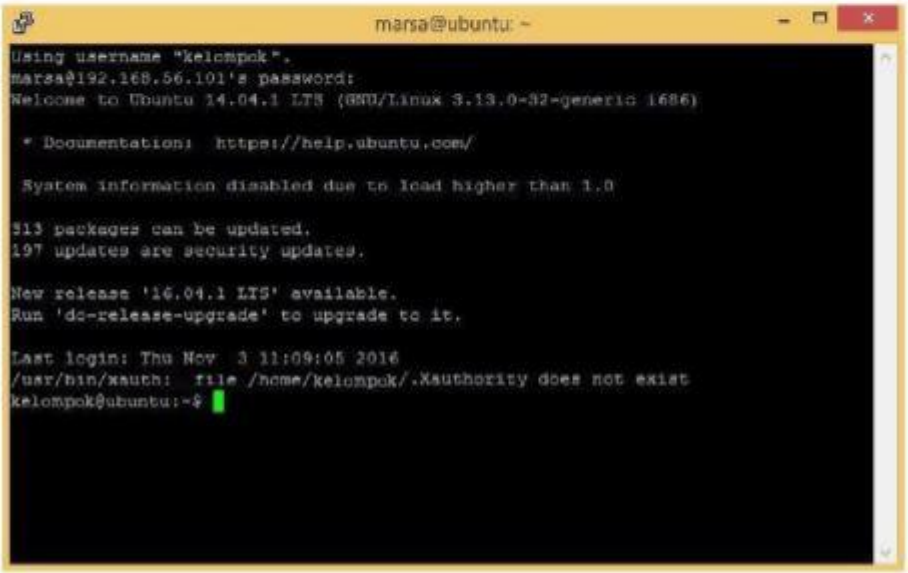
- Setelah berhasil mengkonfigurasi IP Address, mari kita coba menginstall Prerequisites. Pertama, kita lakukan dengan melakukan instalasi Java di Ubuntu server. Ketikkanlah command *sudo apt-get install default-jre-headless*

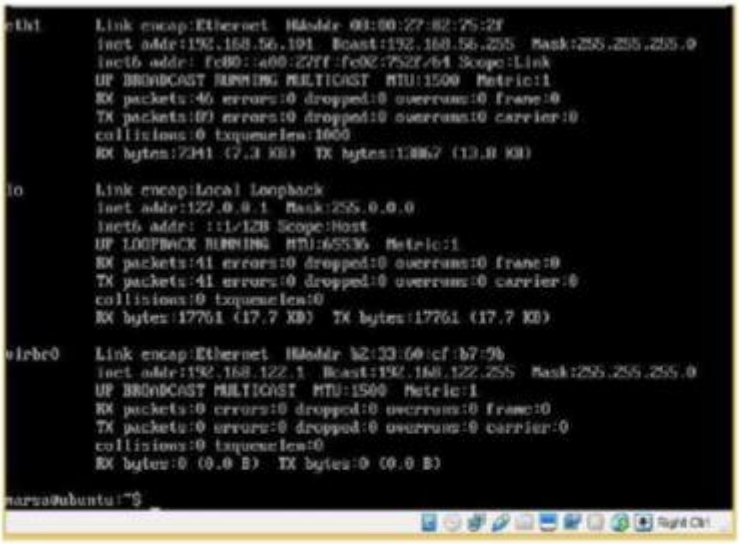
Tunggu proses selesai, lalu ketikkan perintah *nano ~/.bashrc,* lalu tambahkan **export JAVA_HOME=/usr/lib/jvm/default-java,** dan jalankan file tersebut dengan perintah *source ~/.bashrc*

4. Download dan Install OpenDayLight
   - Ketikcommandini di terminal Ubuntu server : **wget https://nexus.opendaylight.org/content/groups/public/org/opendaylight/integration/distribution-karaf/0.4.0-Beryllium/distribution-karaf-0.4.0-Beryllium.tar.gz** dan tunggu hingga proses selesai.

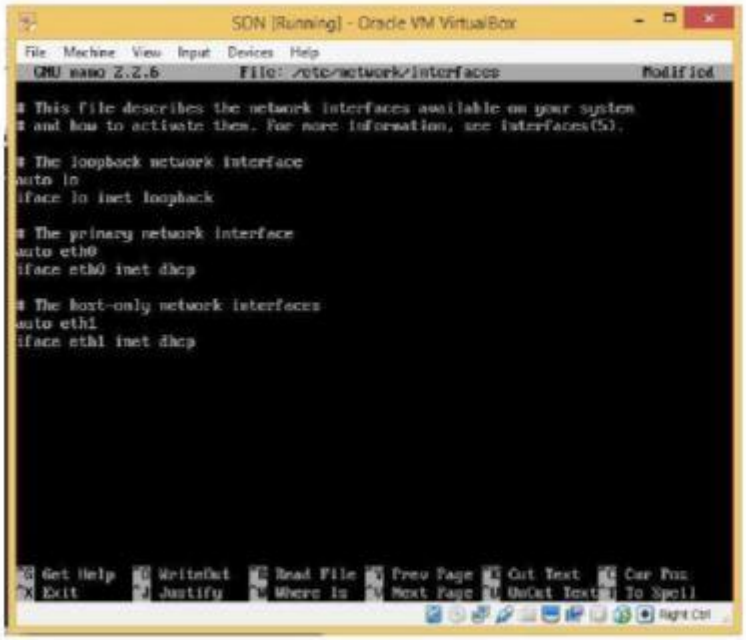


Buka Command Prompt di Windows, lalu arahkan lokasi anda ke tempat anda menyimpan file putty.exe, lalu ketikkan perintah diatas. Berikut tampilan jika sudah berhasil melakukan SSH





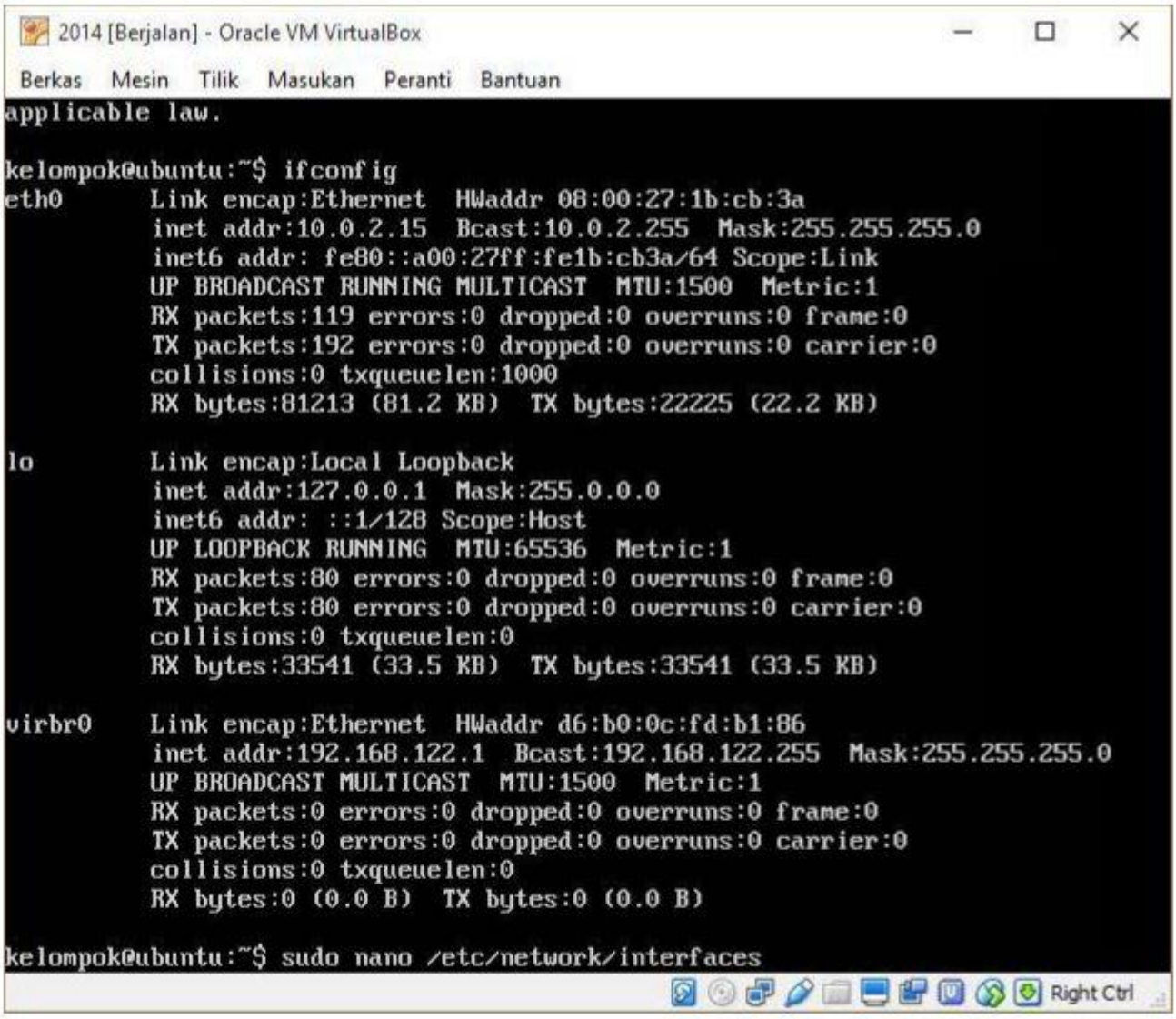
- IP Addres sudah ada, untuk mengecek keaktifan dari jaringan tersebut, gunakan cara SSH IP Address dengan menggunakan Putty di windows.



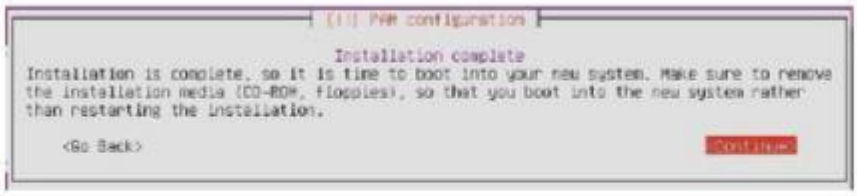
- Setelah anda menambahkan baris tersebut, save dengan menekan tombol ctrl + O, lalu ikuti perintah nya, dan tekan tombol ctrl + X untuk keluar dari editor. Restart kembali Ubuntu Server anda untuk melihat perubahan IP Address anda dengan mengetikkan ifconfig

Terlihat pada gambar diatas eth1 belum memiliki IP Address. Jaringan eth1 harus kita konfigurasikan sebagai default host dengan cara mengedit file /etc/network/interfaces. Ketiklah perintah sudo nano /etc/network/interfaces, dan tambahakan baris :

```
# The host-only network interface
auto eth1
iface eth1 inet dhcp
```

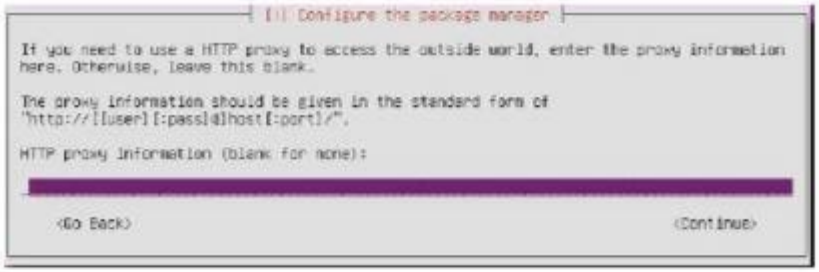


➢ Tunggulah dalam proses instalisasi Ubuntu server. Apabila perbaikan sudah selesai, maka akan muncul begini, lalu pilih continue. Proses instalasi selesai.



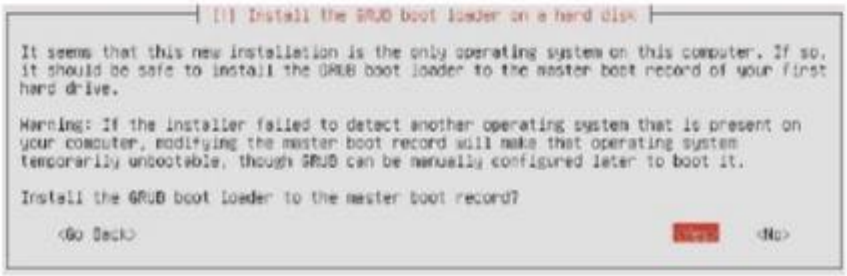
3. Download dan install *prerequisites*

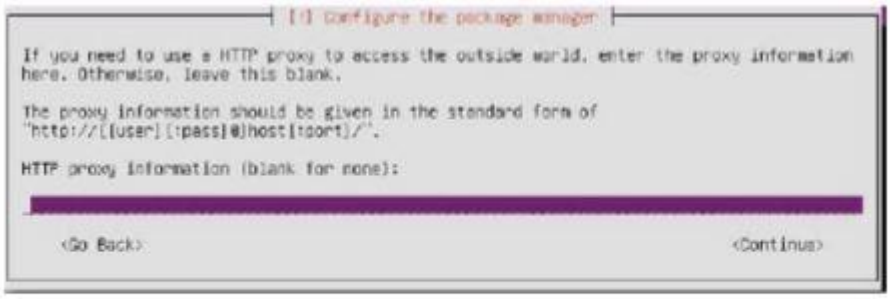
➢ Pertama sekali, kita lihat dan konfigurasi IP Address di Ubuntu server dengan menggunakan perintah *ip addr show*



➢ Pilih lah software yang perlu diinstal. Software yang diinstal adalah : OpenSSH Server, DNS server, PostgreSQL database, Print server, Samba File Sercver, dan Virtual Machine Test.

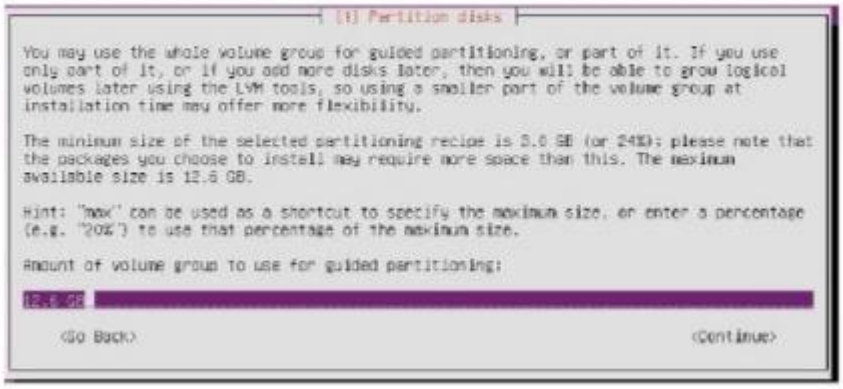
➢ Tunggulah beberapa proses, lalu apabila muncul permintaan GRUB LOADER, pilihlah Yes.



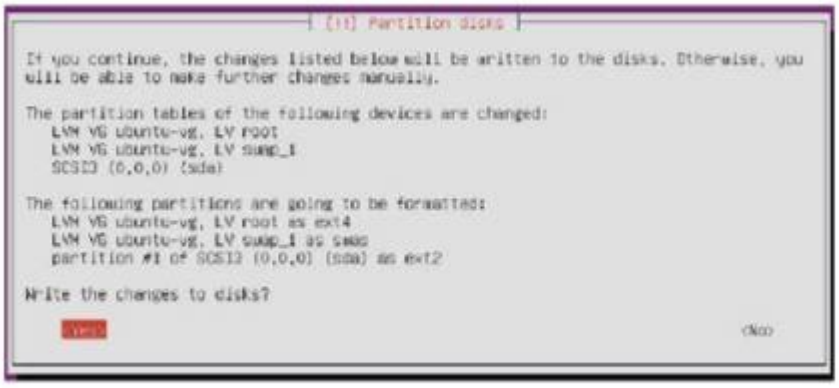


➢ Setelah menunggu beberapa proses, pilih No Automatic Updates, agar sistem operasi tidak mengupdate sistemnya secara otomatis.

➢ Lalu, alokasikan lah memori yang akan digunakan. Disini saya tidak mengubah size nya, dan langsung mengenter pilihan continue.

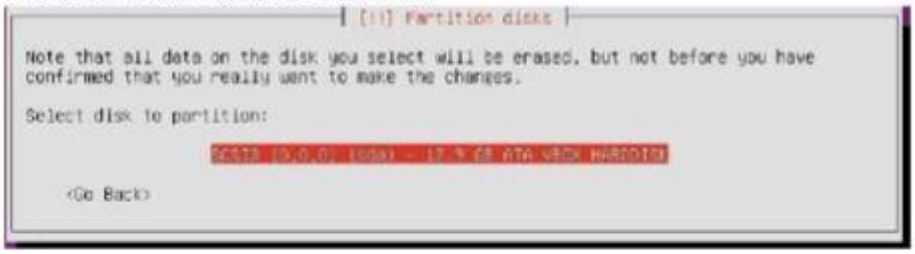


➢ Lalu pilih Yes

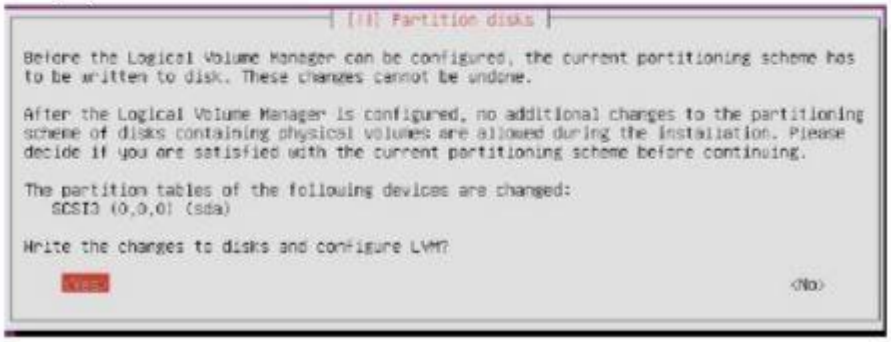


➢ Di bagian ini, kita diminta untuk mengisi HTTP Proxy Information, tidak perlu diisi. Apabila tidak mau diisi, kosongkan saja.

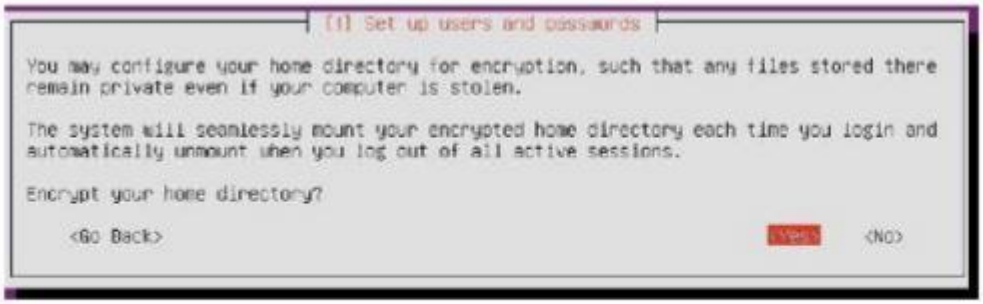
- Pilih disk untuk di partisi, lalu tekan enter.



- Pilih yes, lalu enter

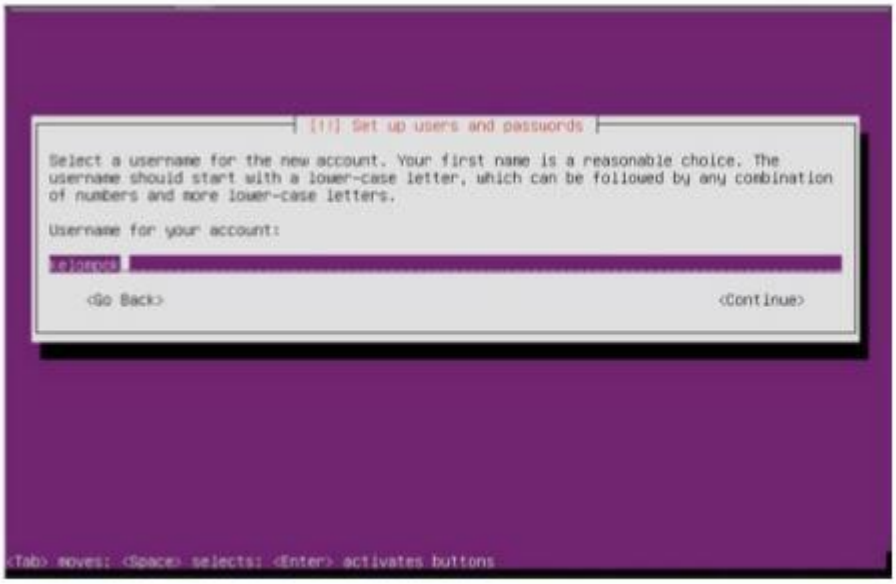


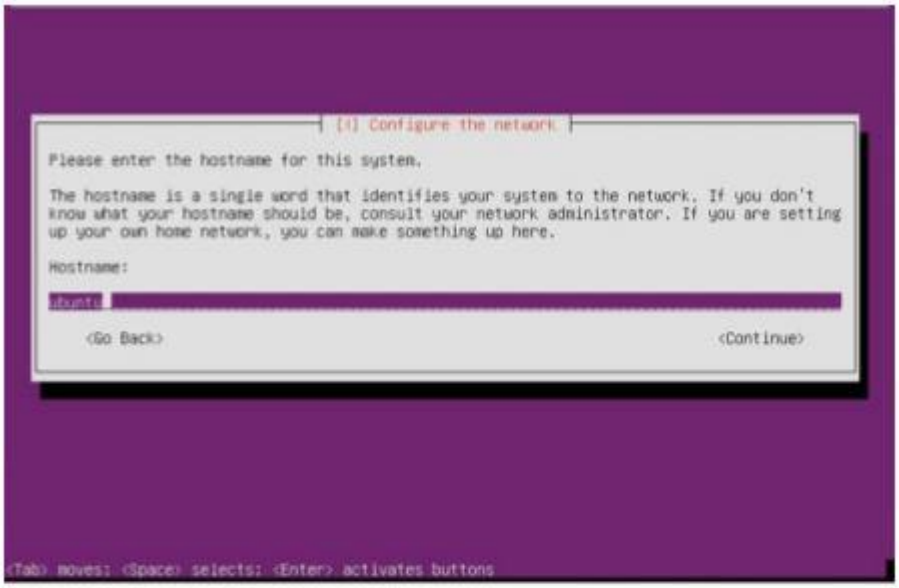
- Pilih Guided – use entire disk and set up LVM pada pengaturan partitioning method

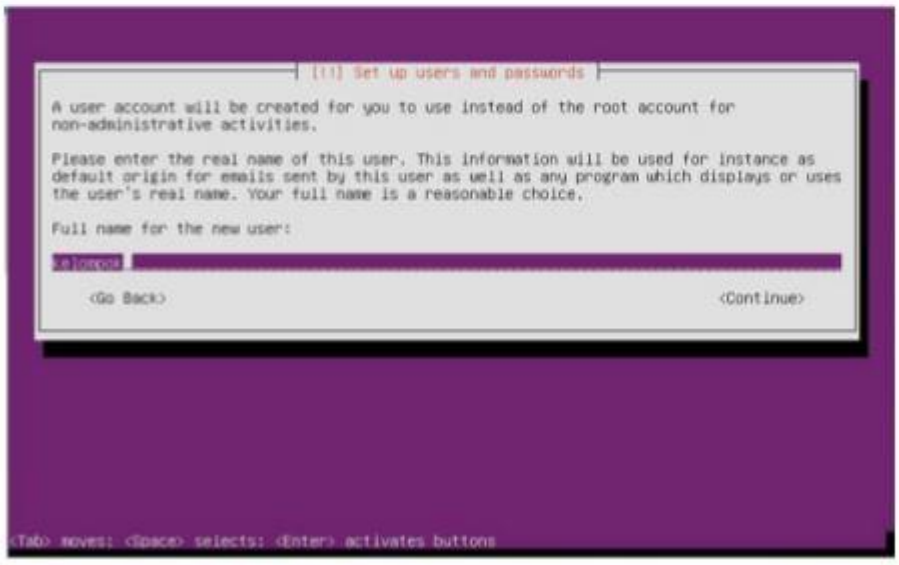


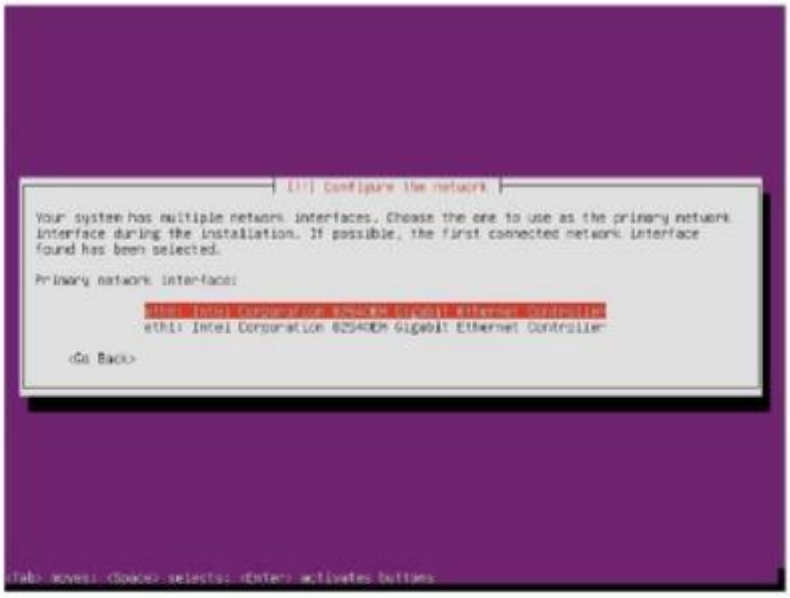
- Pilih Zona Waktu

- Pilih no pada pengaturan Encrypt your Home Directory. Jika memilih No, maka semua user bisa melihat direktori home anda

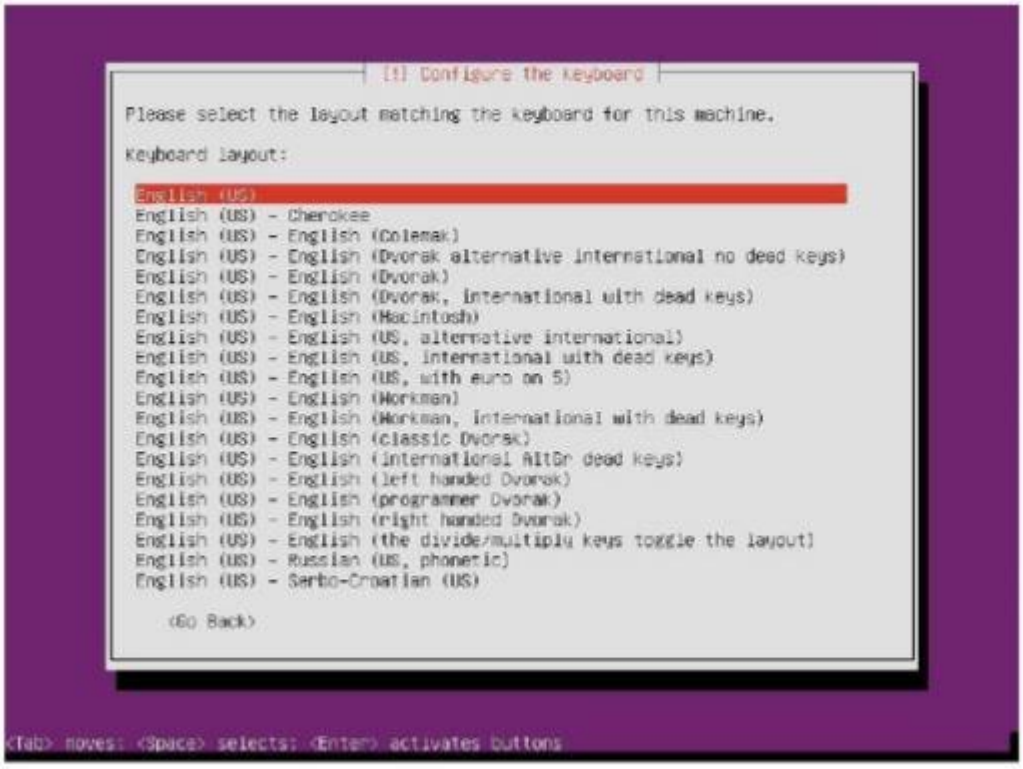

[!!] Set up users and passwords
Select a username for the new account. Your first name is a reasonable choice. The username should start with a lower-case letter, which can be followed by any combination of numbers and more lower-case letters.
Username for your account:
<Go Back>
<Continue>
<Tab> moves; <Space> selects; <Enter> activates buttons


[!] Configure the network
Please enter the hostname for this system.
The hostname is a single word that identifies your system to the network. If you don't know what your hostname should be, consult your network administrator. If you are setting up your own home network, you can make something up here.
Hostname:
ubuntu
<Go Back>
<Continue>
<Tab> moves; <Space> selects; <Enter> activates buttons

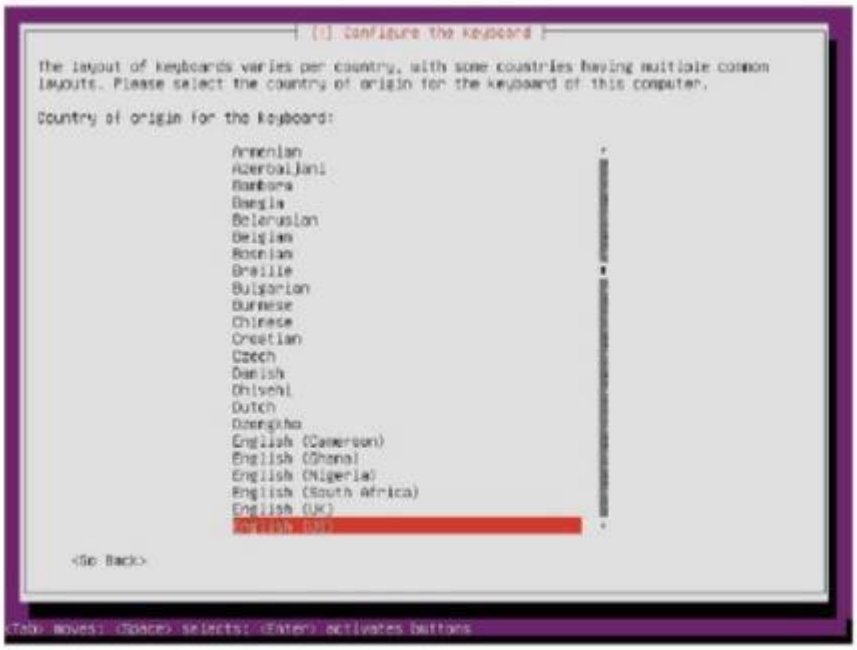

[!!] Set up users and passwords
A user account will be created for you to use instead of the root account for non-administrative activities.
Please enter the real name of this user. This information will be used for instance as default origin for emails sent by this user as well as any program which displays or uses the user's real name. Your full name is a reasonable choice.
Full name for the new user:
<Go Back>
<Continue>
<Tab> moves; <Space> selects; <Enter> activates buttons

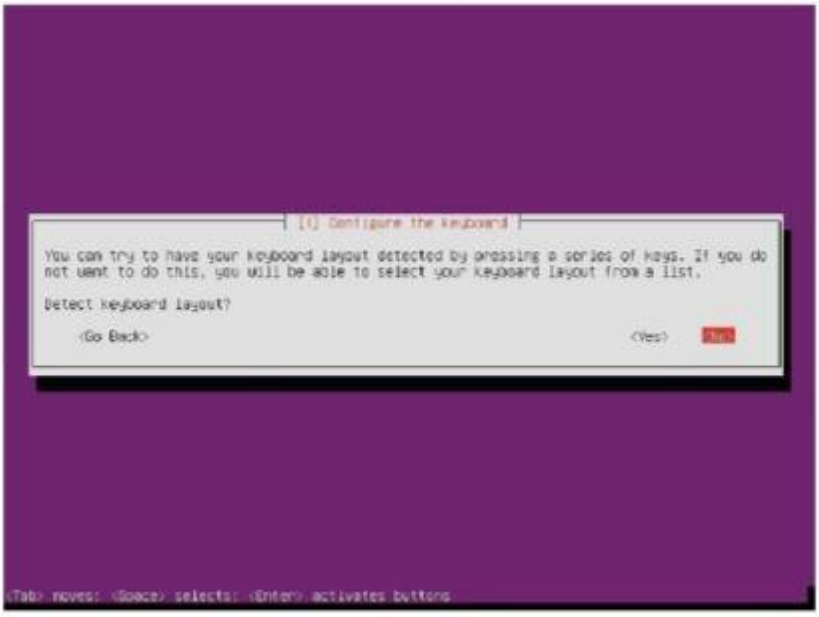


➢ Isilah nama hostname (disini saya mengisi hostname nya dengan nama Ubuntu), lalu isi Full Name anda, Username dan password untuk anda gunakan sewaktu login.

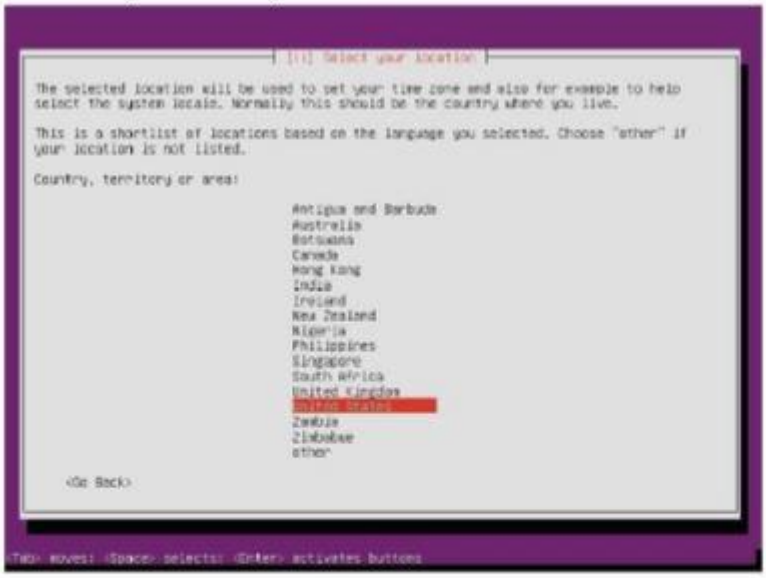


➢ Setelah proses selesai, pilih eth0 pada pengaturan primary network.

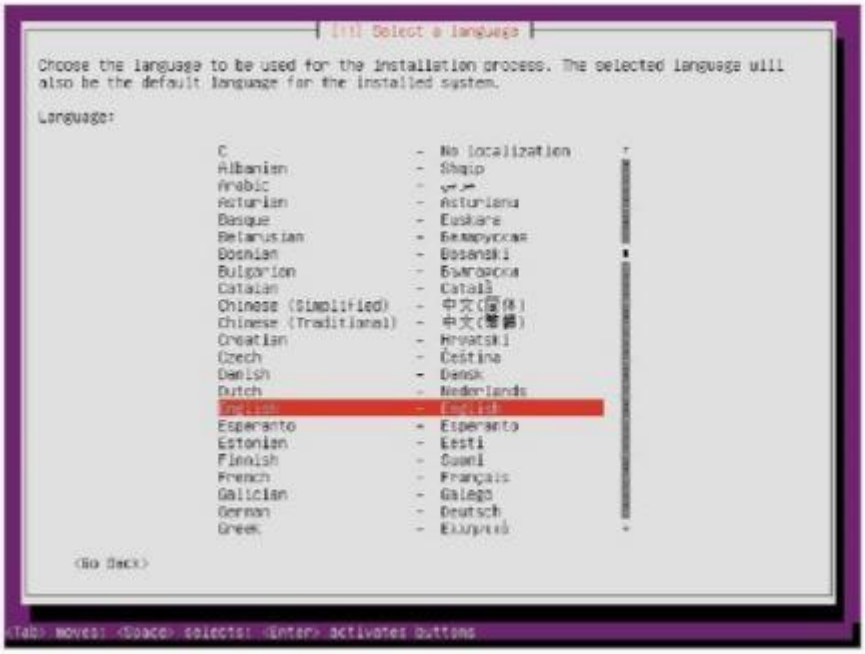




➢ Pilih pilihan English (US) untuk mengatur keyboard layout, lalu tunggu hingga proses selesai.

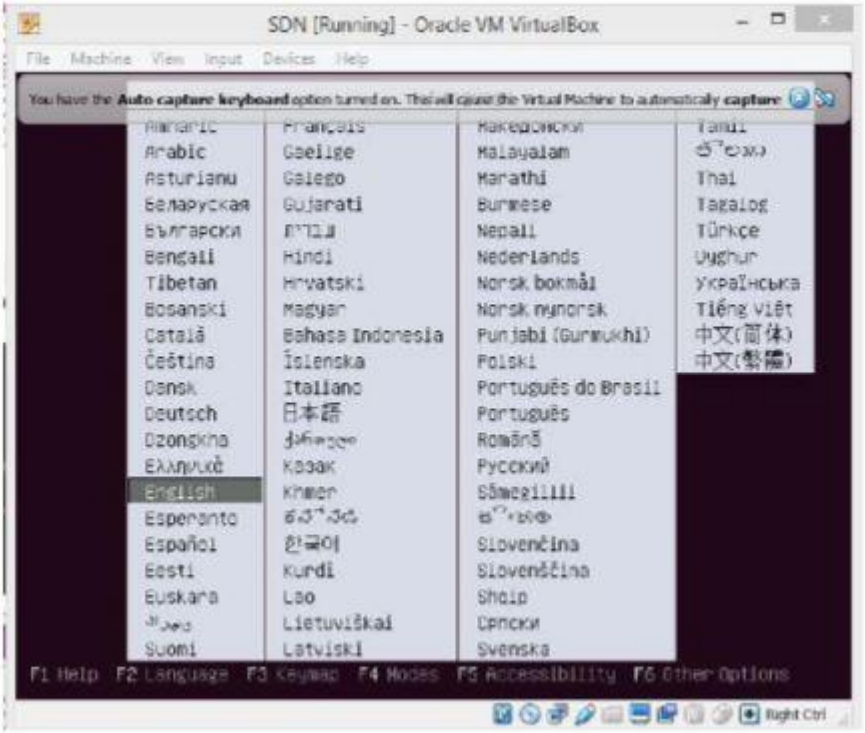


➢ Pilih No pada pengaturan Detect Keyboard Layout.



➢ Pilih country atau territory area

➢ Pilih Language



➢ Lalu pilih pilihan Install Ubuntu Server