

Preparar equipo con sistema operativo Ubuntu (16.04 o 14.04) para acceder a él con SSH y poder configurarlo con Ansible

Para poder utilizar Ansible sobre un nuevo equipo Ubuntu se necesita tener acceso a él por SSH (y por tanto se requiere que el equipo tenga instalado OpenSSH Server), y además poder ejecutar en él los programas Python 2.7 que Ansible crea al ejecutar sus módulos (por tanto, se requiere que el equipo tenga instalado Python 2.7). Además, el nuevo equipo debe tener al menos un usuario con derechos de acceso y administración, y una dirección IP.

La instalación ordinaria del CD de Ubuntu exige definir y configurar un usuario y su password (Ver Pag. 10), y aunque por omisión asigna dirección IP al nuevo equipo por DHCP, permite de manera opcional configurarlo manualmente con una IP fija (Ver Pag. 7 a 9). También permite configurar otras propiedades, entre ellas el hostname del equipo (requerido) así como otras varias ahora menos relevantes (zona horaria, localización, idioma, configuración de teclado, etc.).

Ubuntu Server no tiene instalado Open SSH Server en su configuración mínima, ni abierto el servicio SSH. Sin embargo, el proceso de instalación desde el CD de Ubuntu permite instalar Open SSH, y es conveniente hacerlo (Ver Pag.15)

Para preparar Ubuntu 14.04 basta con incluir Open SSH Server al instalar el CD, porque Python 2.7 viene ya instalado por defecto.

Para preparar Ubuntu 16.04 es necesario, además, instalar Python 2.7, que no viene por defecto (viene otro superior, pero no compatible aún con Ansible). Esto se puede hacer por SSH con `$ sudo apt-get -y install python-minimal`, o con un playbook similar al siguiente:

```
# Add this snippet to the top of your playbook.
# It will install python2 if missing (but checks first so no expensive repeated apt updates)
# gwillem@gmail.com
```

```
- hosts: all
  gather_facts: False
  become: true
```

```
# See "Get Ansible to work on bare Ubuntu 16.04 without python 2.7"
# At https://gist.github.com/gwillem/4ba393dceb55e5ae276a87300f6b8e6f
```

```
- name: install python 2
  raw: test -e /usr/bin/python || (apt -y update && apt install -y python-minimal)
  register: output
  changed_when:
    - output.stdout != ""
    - output.stdout != "\r\n"
- name: Gathering Facts
  setup: # aka gather_facts
```

Installation of Ubuntu 16.04 Server Edition

by [Matei Cezar](#) | Published: April 23, 2016 | Last Updated: April 23, 2016

Install Ubuntu 16.04 Server Edition

1. On the first step download the latest version of **Ubuntu Server ISO** image on your computer.

Once the image download completes, burn it to a CD or create a bootable USB disk.

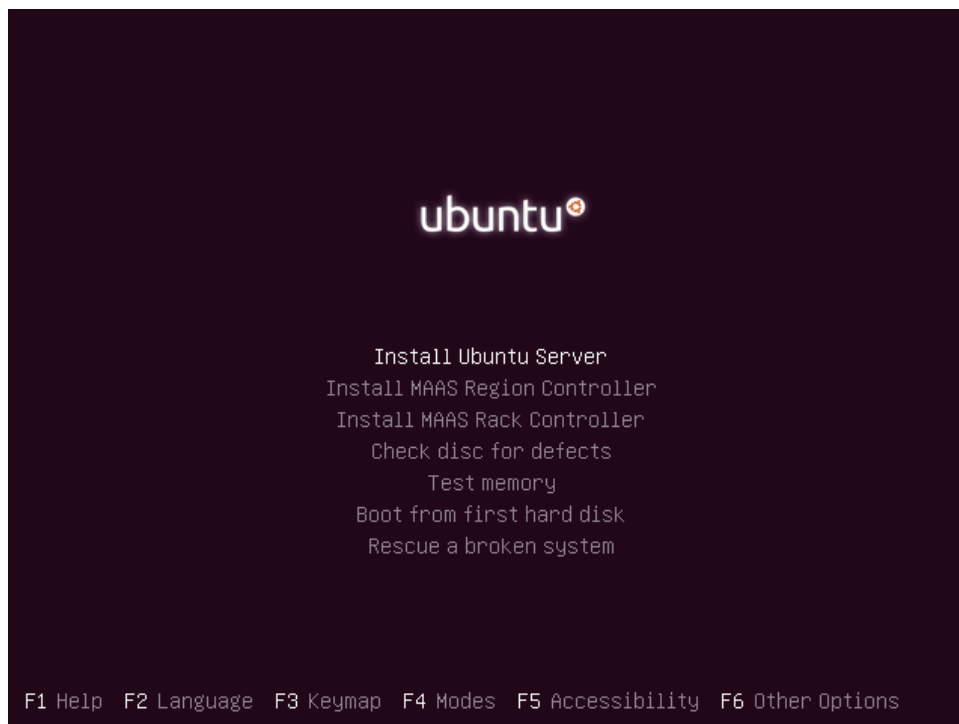
2. Place the bootable media into the appropriate drive, start-up the machine and instruct the **BIOS/UEFI** by pressing a special function key (**F2**, **F11**, **F12**) to boot-up from the inserted USB/CD drive.

In a few seconds you will be presented with the first screen of Ubuntu installer. Select your language to perform the installation and hit **Enter** key to move to the next screen.



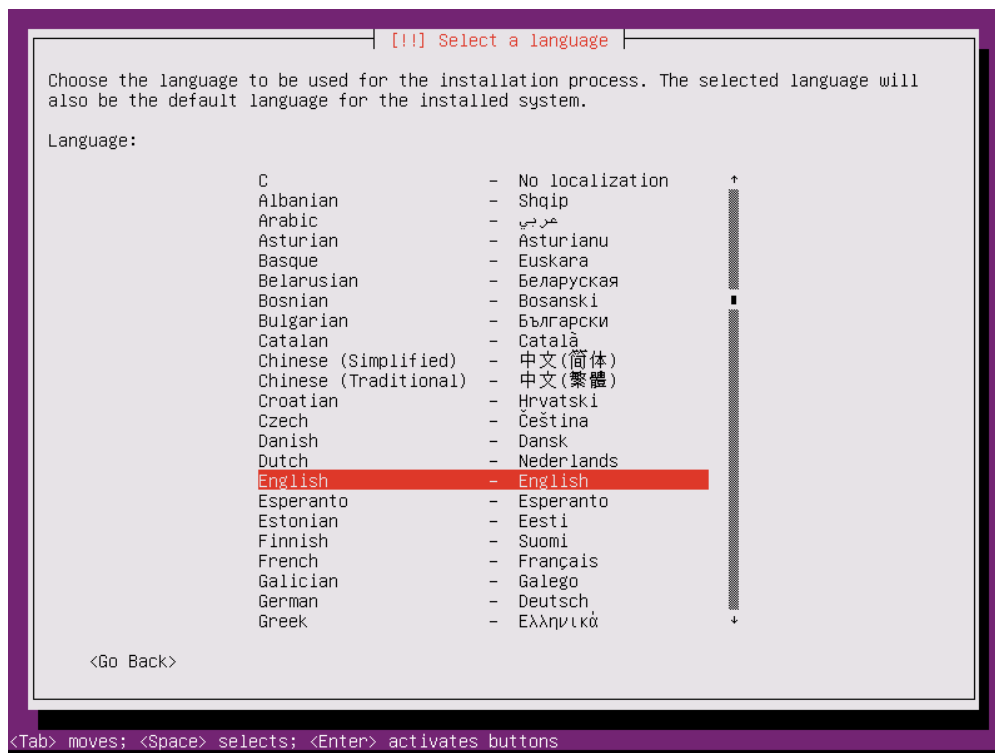
Choose Ubuntu 16.04 Server Installation Language **Español**

3. Next, select the first option, **Install Ubuntu Server** and press **Enter** key to continue.



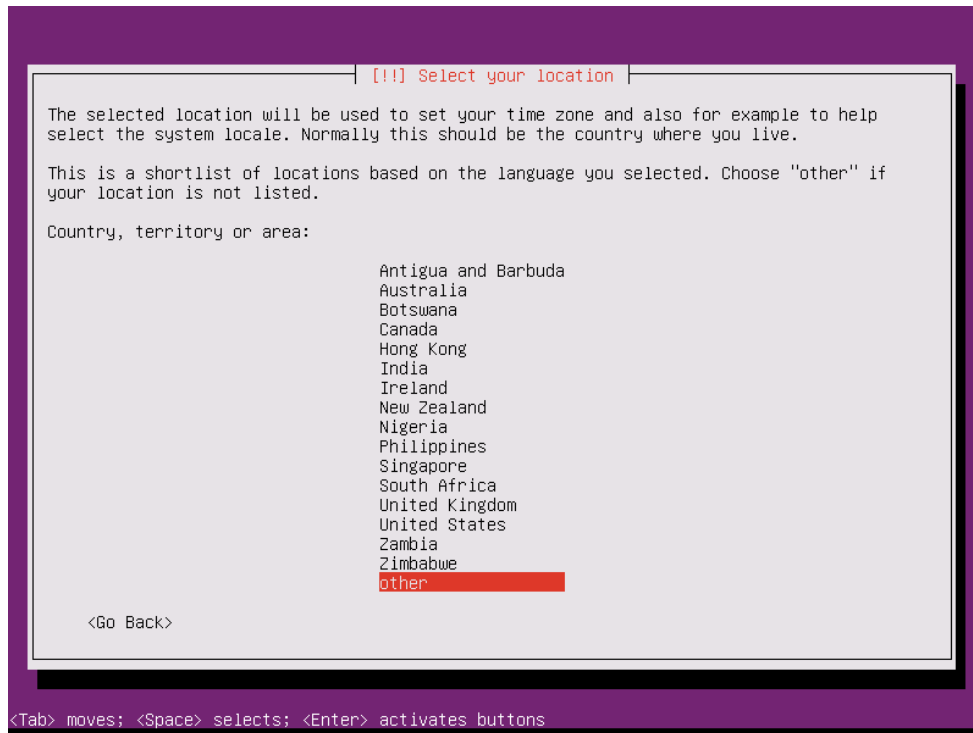
Install Ubuntu 16.04 Server **Install Ubuntu 16.04 Server**

4. Select the language you wish to install the system and press **Enter** again to continue further.

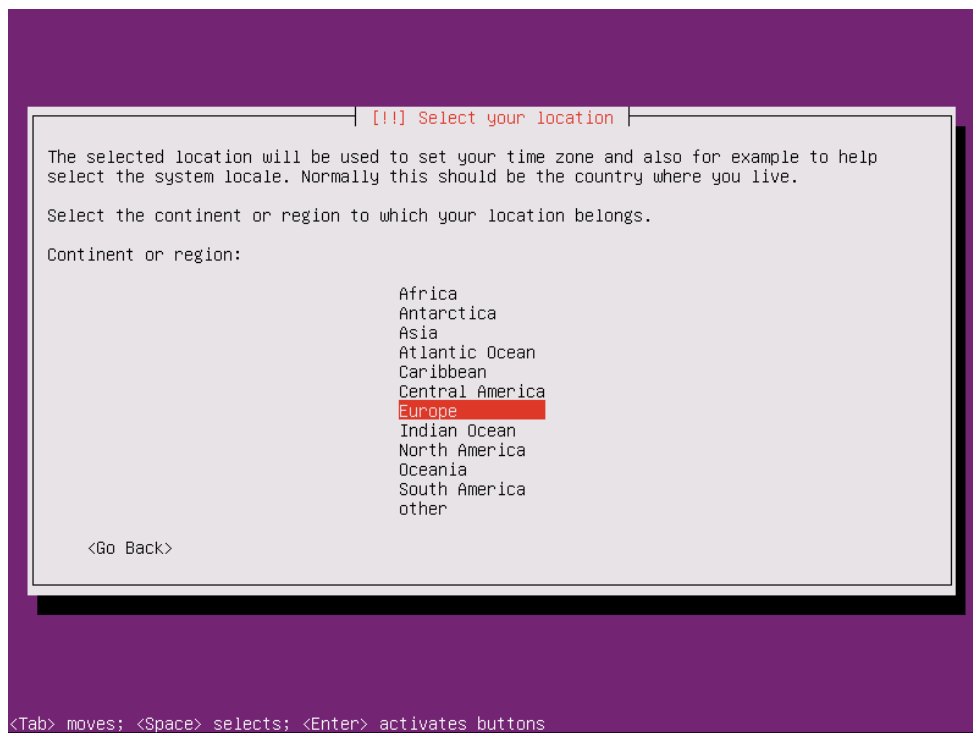


Select Language for Ubuntu 16.04 Server **Spanish**

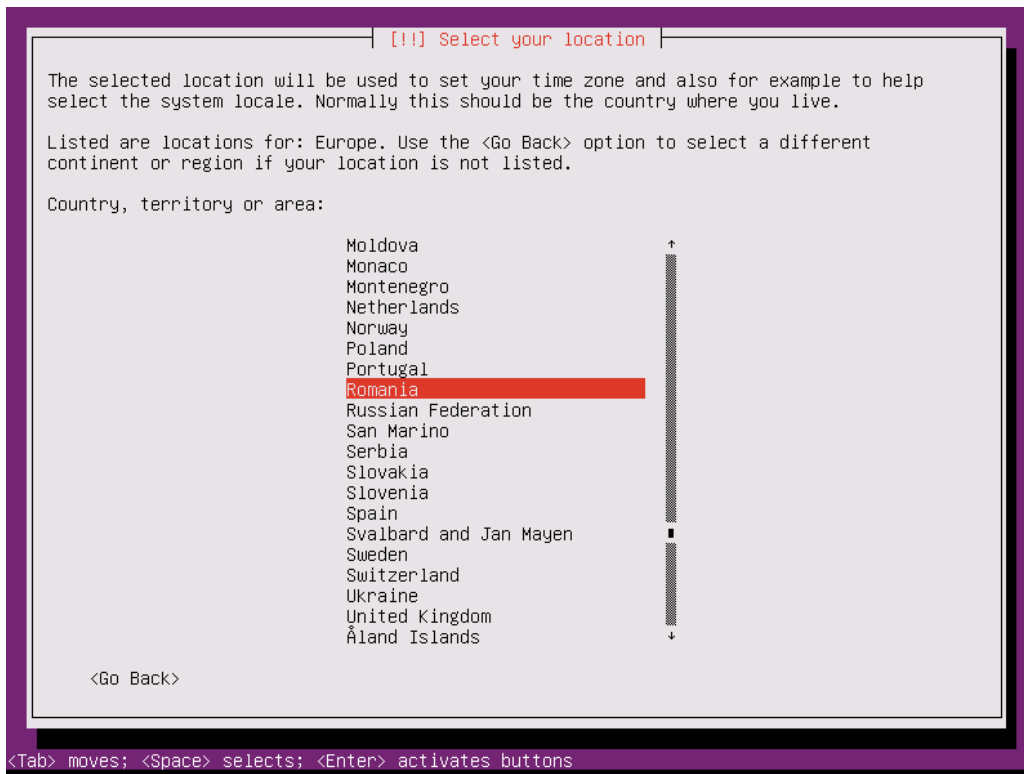
5. On the next series of screen choose your physical location from the presented list. If your location is different than the ones offered on the first screen, select other and hit **Enter** key, then select the location based on your continent and country. This location will be also used by the timezone system variable. Use the below screenshots as a guide.



Choose Location for Ubuntu 16.04 Server **España**

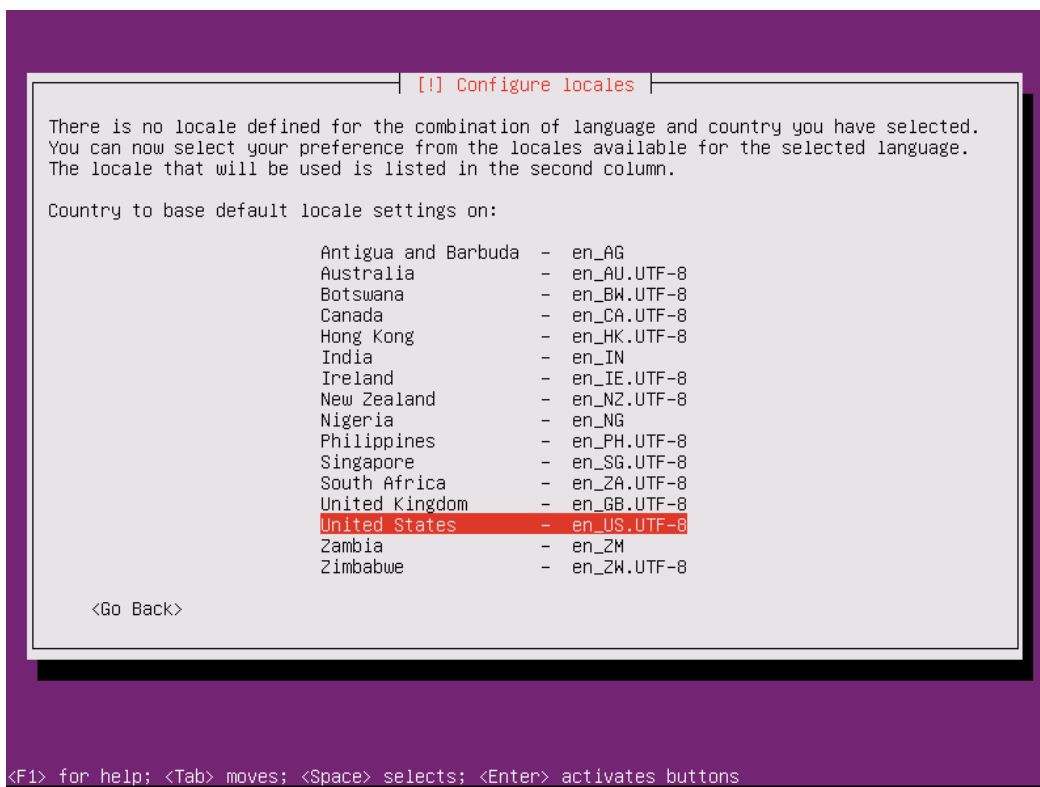


Select Country Region

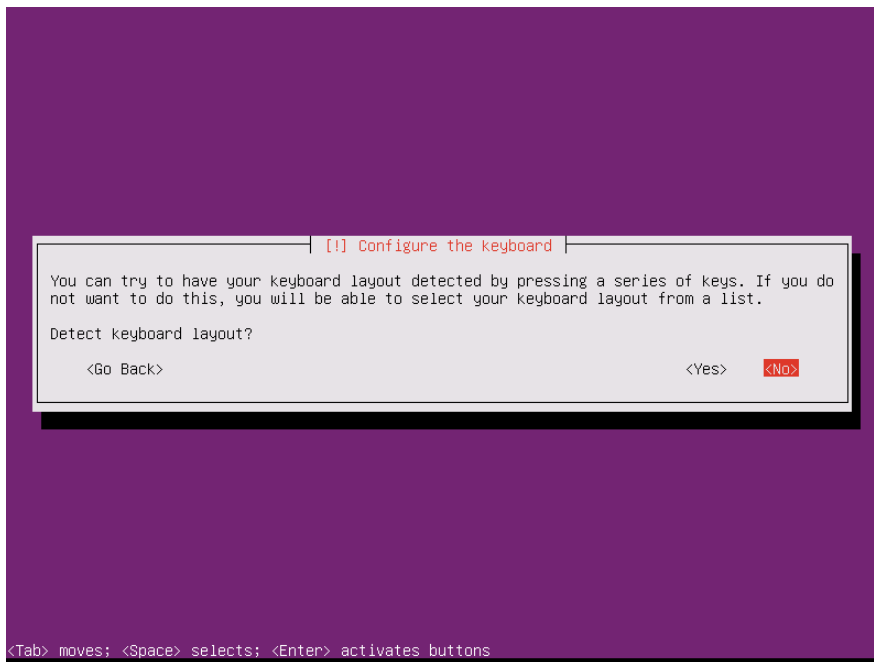


Select Area Location

6. Assign the locales and keyboard settings for your system as illustrated below and hit **Enter** to continue the installation setup.



Configure Locales

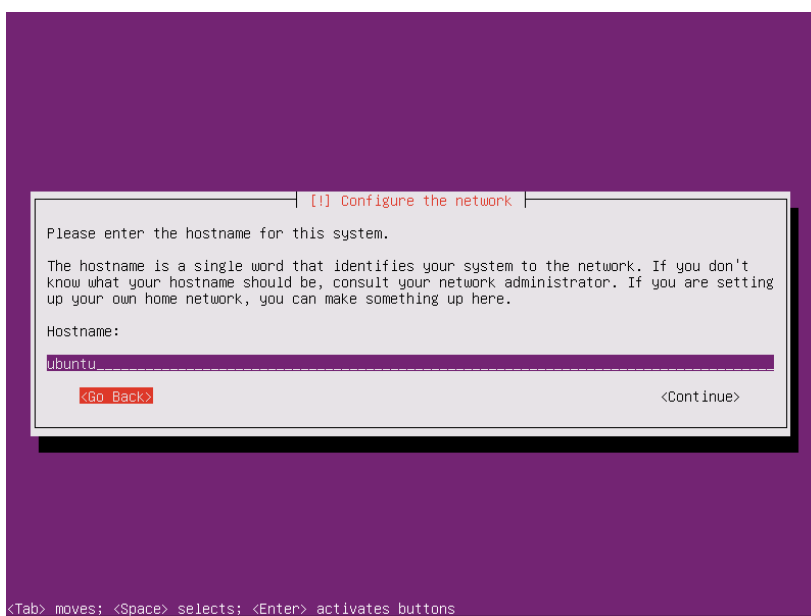


Configure Keyboard Layout **NO, y te ofrece lista donde puedes elegir Español**

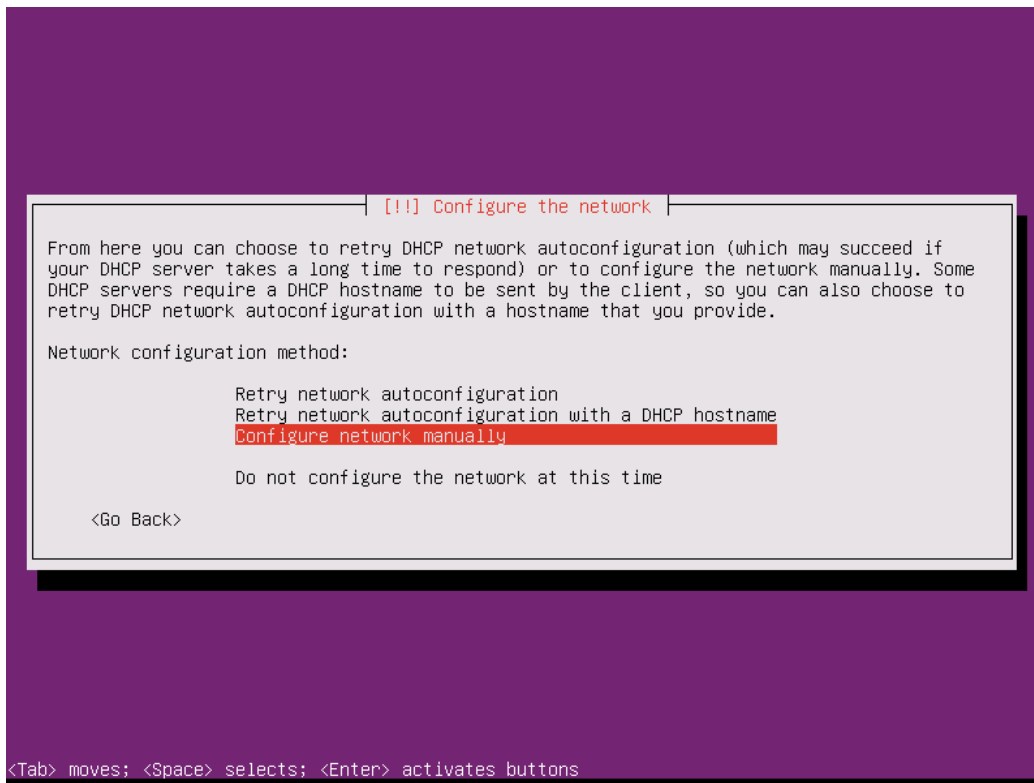
7. The installer will load a series of additional components required for the next steps and will automatically configure your network settings in case you have a DHCP server on the LAN.

Because this installation is intended for a server it's a good idea to setup a static IP address for your network interface.

To do this you can interrupt the automatic network configuration process by pressing on **Cancel** or once the installer reaches hostname phase you can hit on **Go Back** and choose to **Configure network manually**.



Set Ubuntu 16.04 Hostname

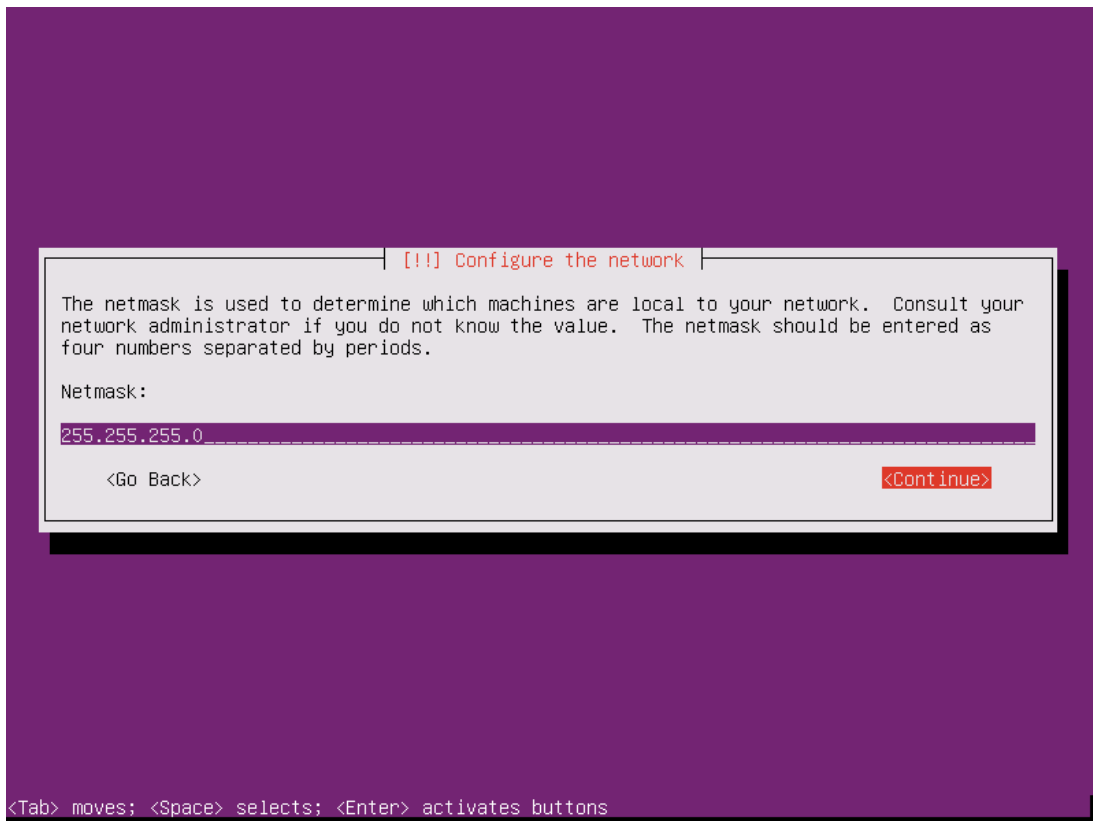


Configure Network Manually

8. Enter your network settings accordingly (IP Address, netmask, gateway and at least two DNS nameservers) as illustrated on the below images.



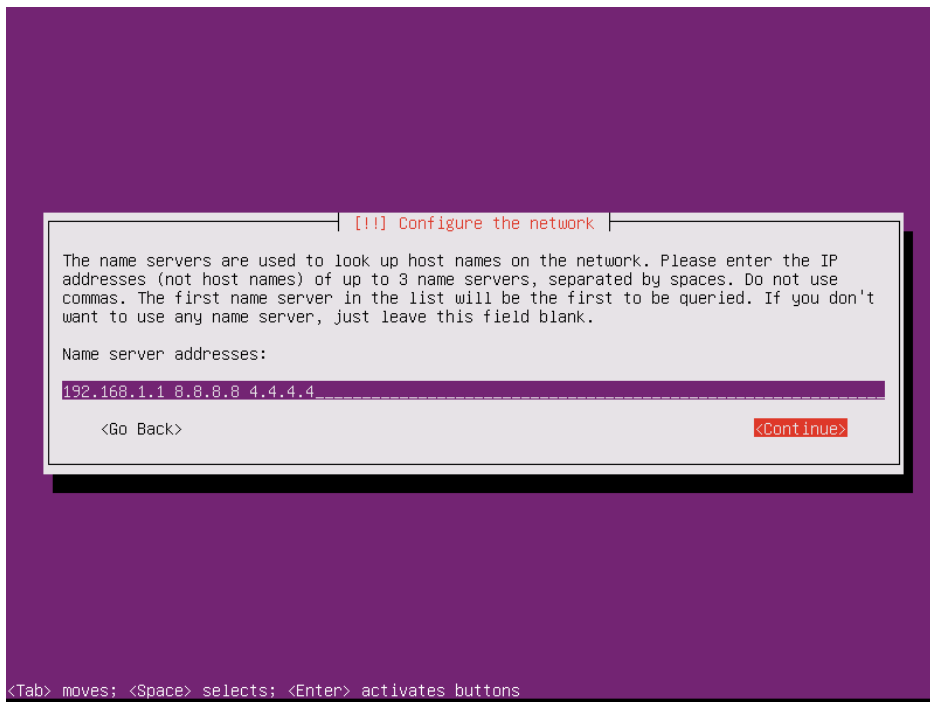
Set Static IP Address on Ubuntu 16.04 PONER AQUÍ IP DESEADA, p.e. 192.168.1.30



Configure Network Mask for Ubuntu 16.04

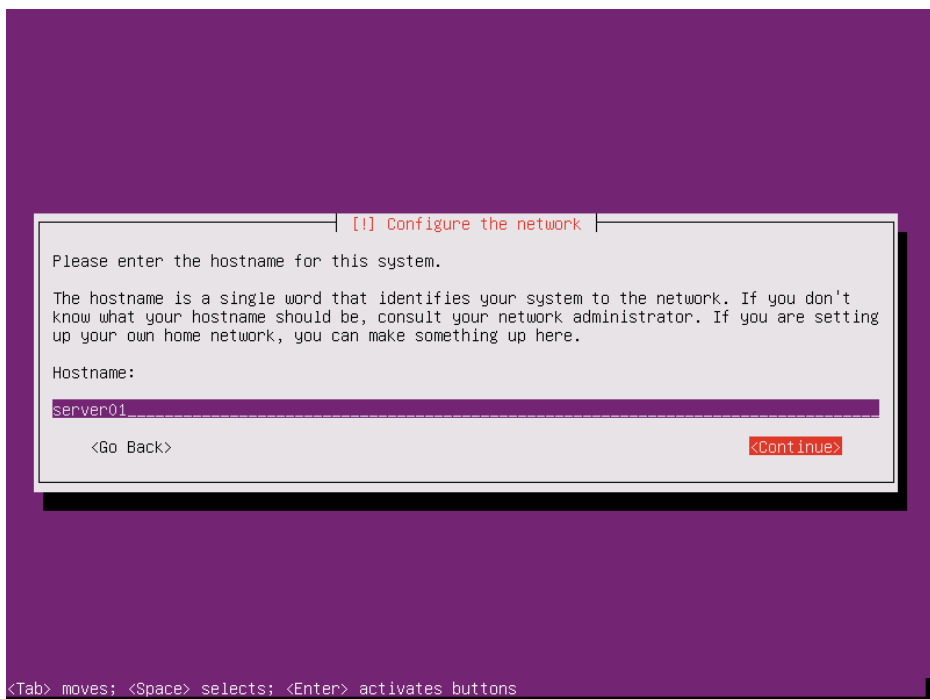


Configure Network Gateway for Ubuntu 16.04

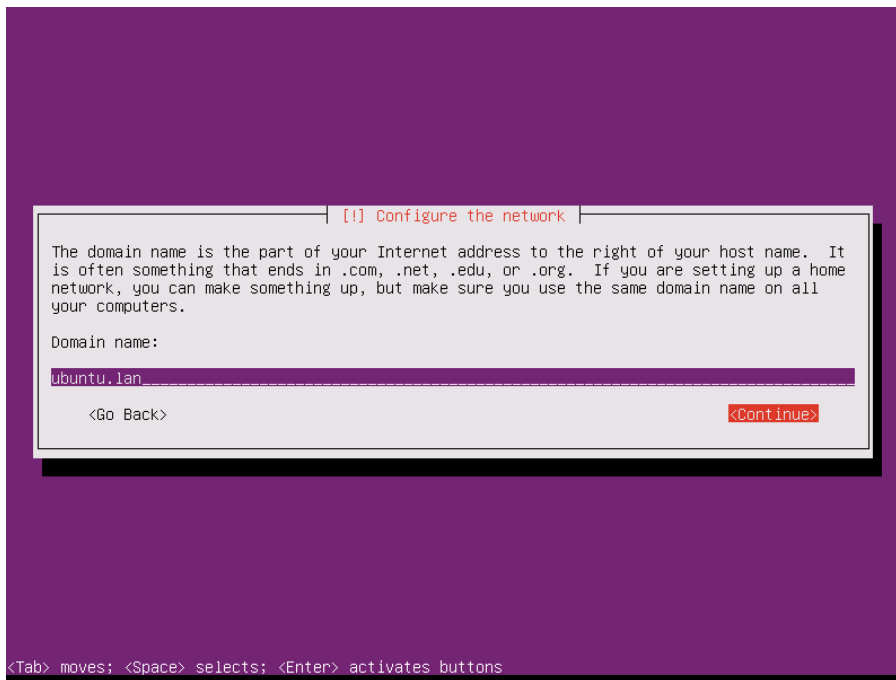


Configure Network DNS on Ubuntu 16.04

9. On the next step **setup a descriptive hostname for your machine (required)** and a domain (not necessary required) and hit on **Continue** to move to the next screen. This step concludes the network settings.



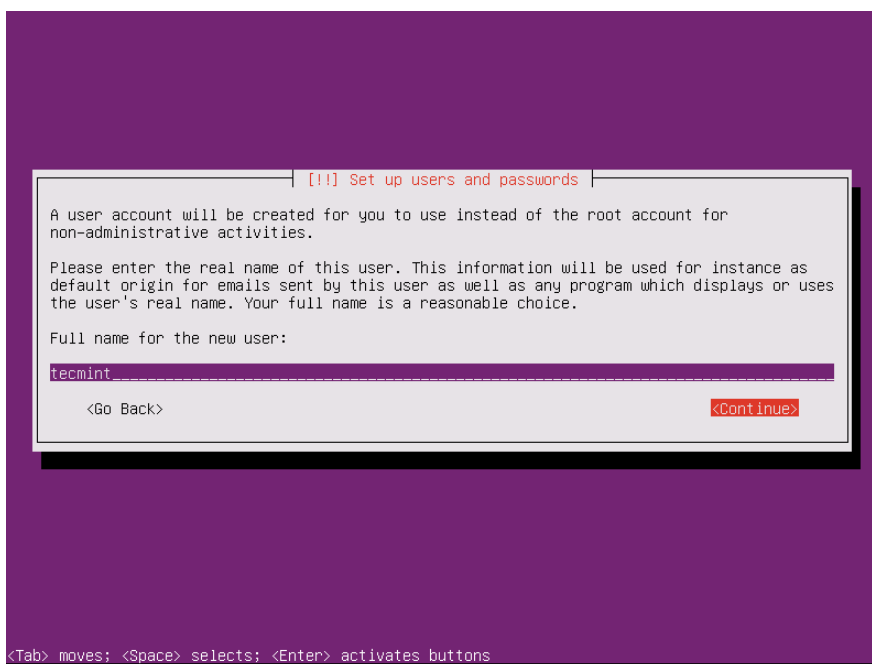
Set Ubuntu 16.04 Server Hostname



Set Ubuntu 16.04 Domain Name

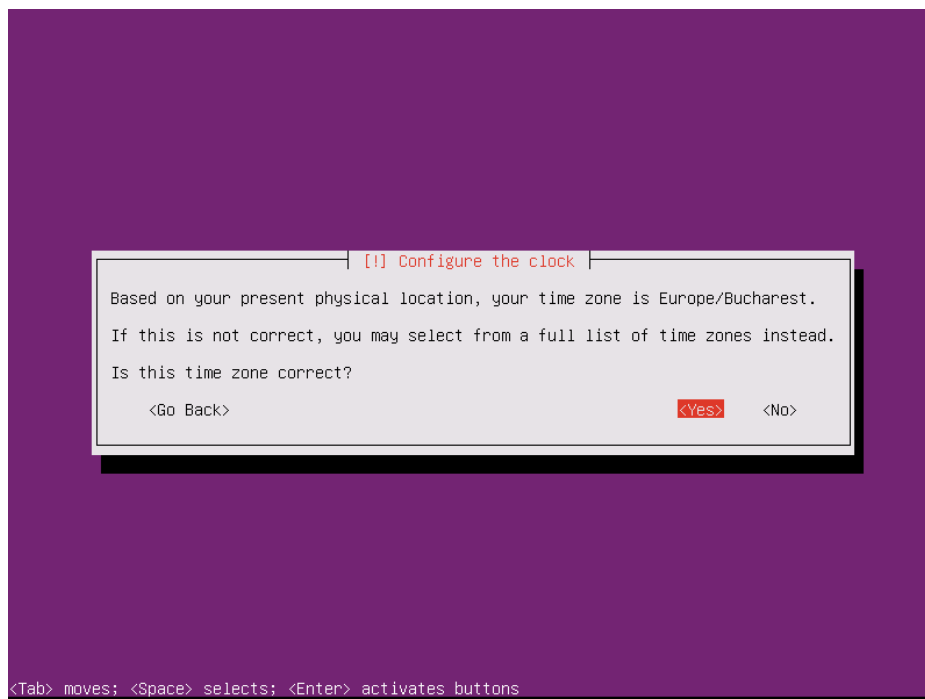
10. On this step the installer prompts you to setup a username and a password for your system. This username will be granted by the system with sudo powers, so, technically, this user will be the supreme administrator next to root account (which is disabled by default).

Thus, choose an inspired username, maybe hard to guess for security reasons, with a strong password and hit on Continue. Choose not to encrypt your home directory and press **Enter** to continue further.



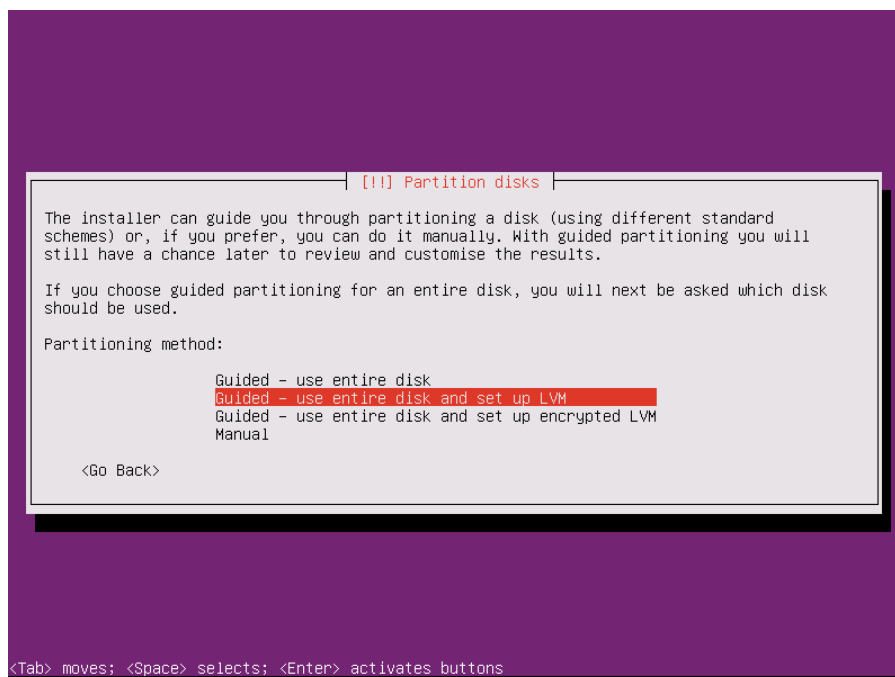
Setup User and Password

11. Next, the installer will automatically set your clock based on the physical location configured earlier. In case the location is correctly chosen hit on **Yes** to continue to disk partition layout.



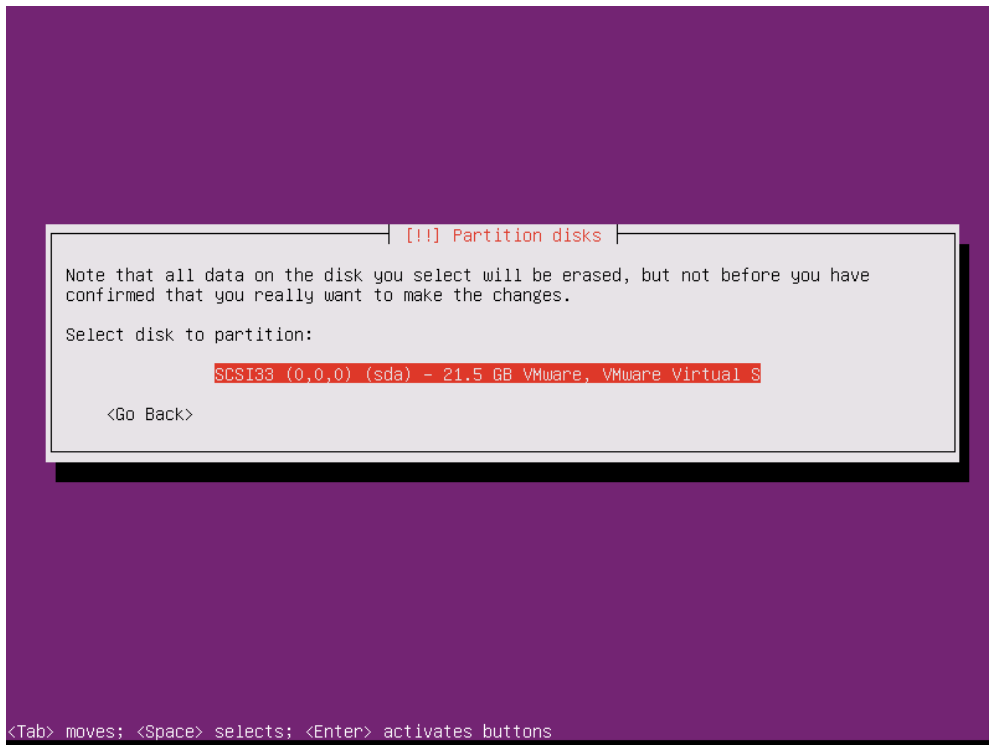
Configure System Clock **YES**

12. On the next step you can choose the method that will be used to slice up your disk. For instance, if you need to create custom partition scheme (such as **/home**, **/var**, **/boot** etc) choose Manual method.



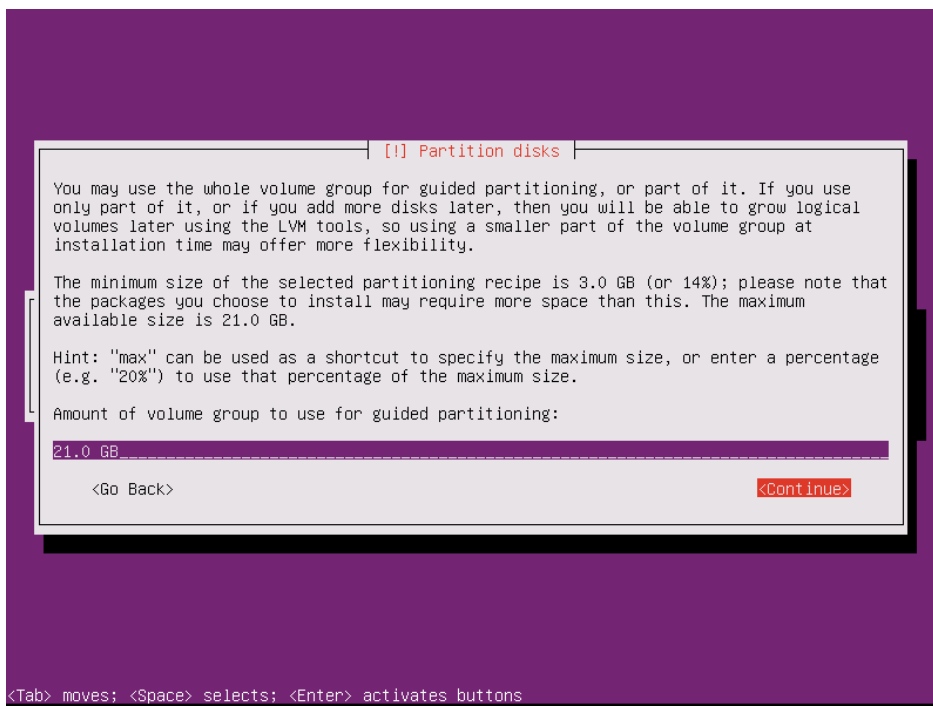
Select Partition Method Use **Guided - use entire disk**

13. Next, select the disk that will be used by the installer to create partitions and press **Enter** key.

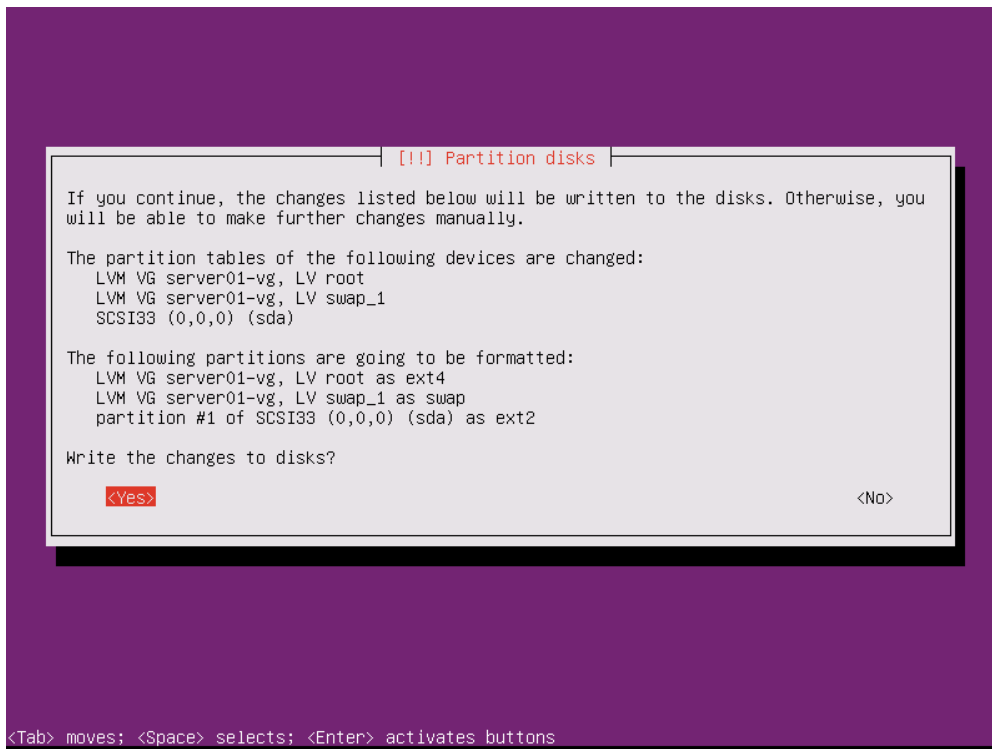


Select Disk Partition **ACEPTAR LA QUE TE OFRECE**

14. Answer with **Yes** at the next screen in order to commit changes to disk with LVM scheme and hit on **Continue** to use the entire disk space for guided partitions.

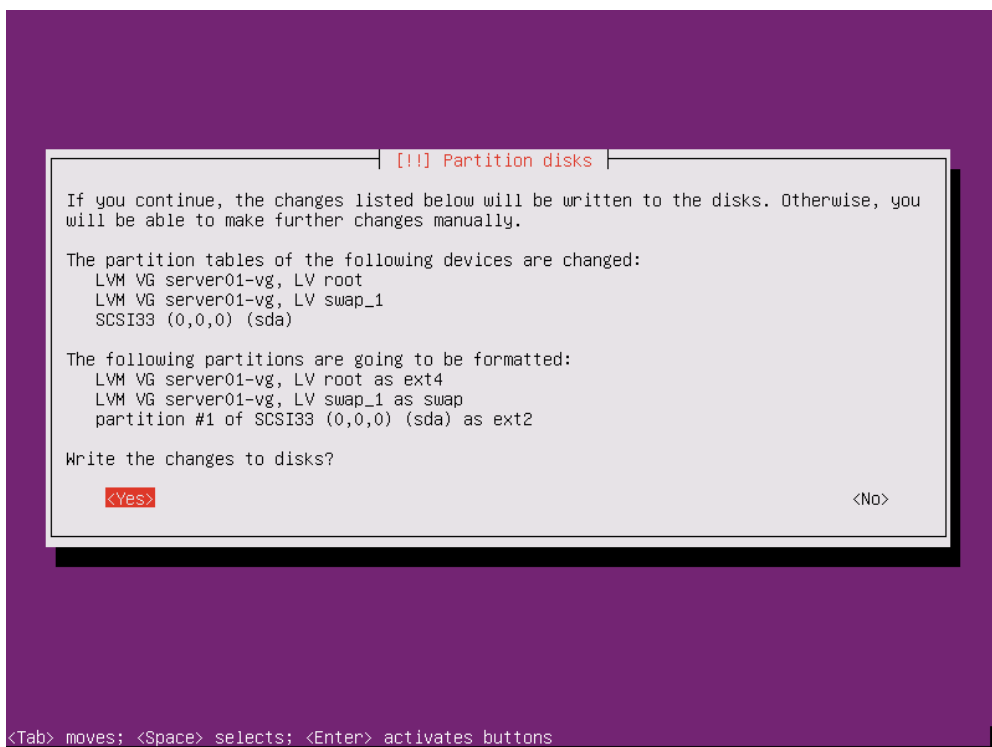


Add Disk Partition Size

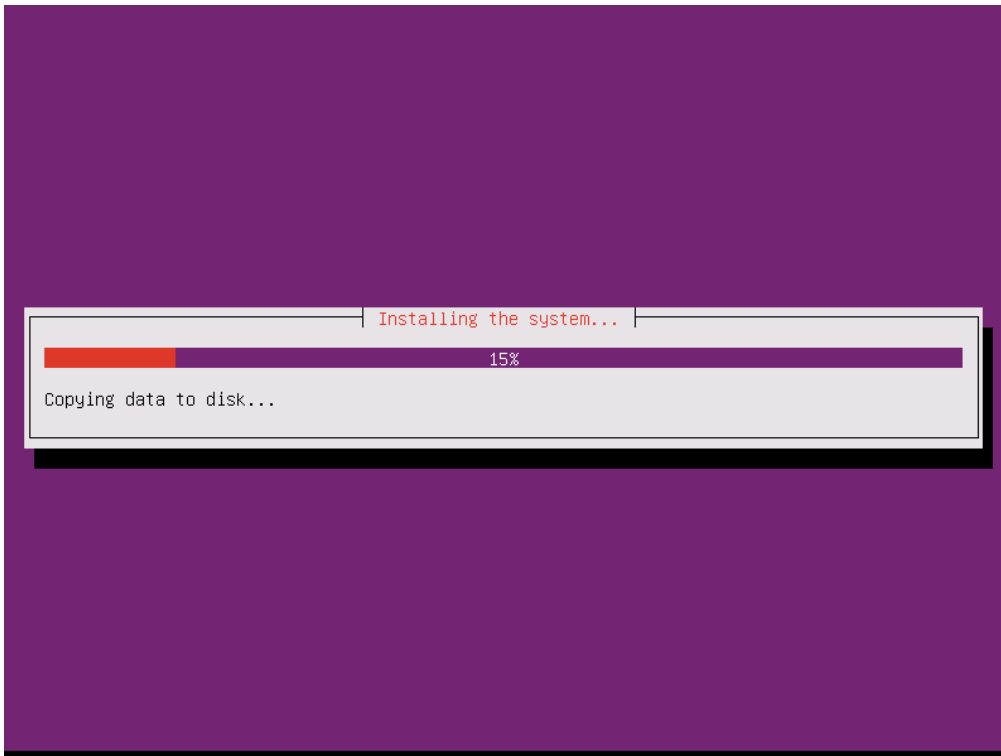


Confirm Disk Partition Changes **YES**

15. Finally, approve for the last time the changes to be written to disk by pressing on **Yes** and the installation will now begin. From this step on all the changes will be committed to disk.

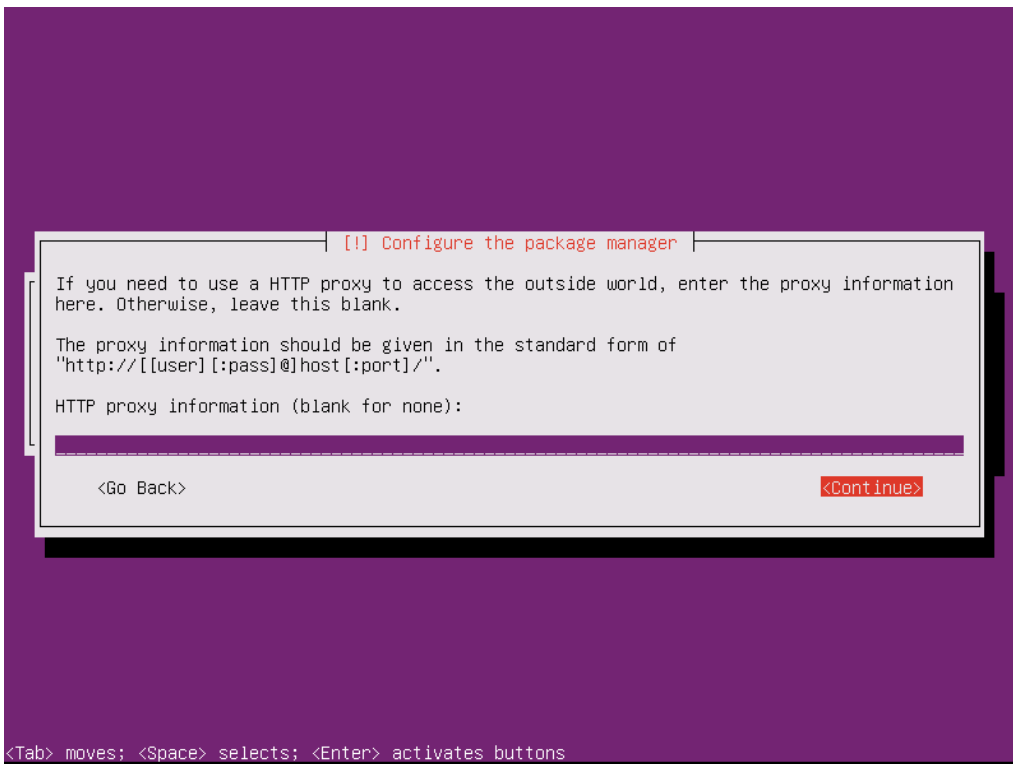


Confirm Disk Partition Changes **Si**



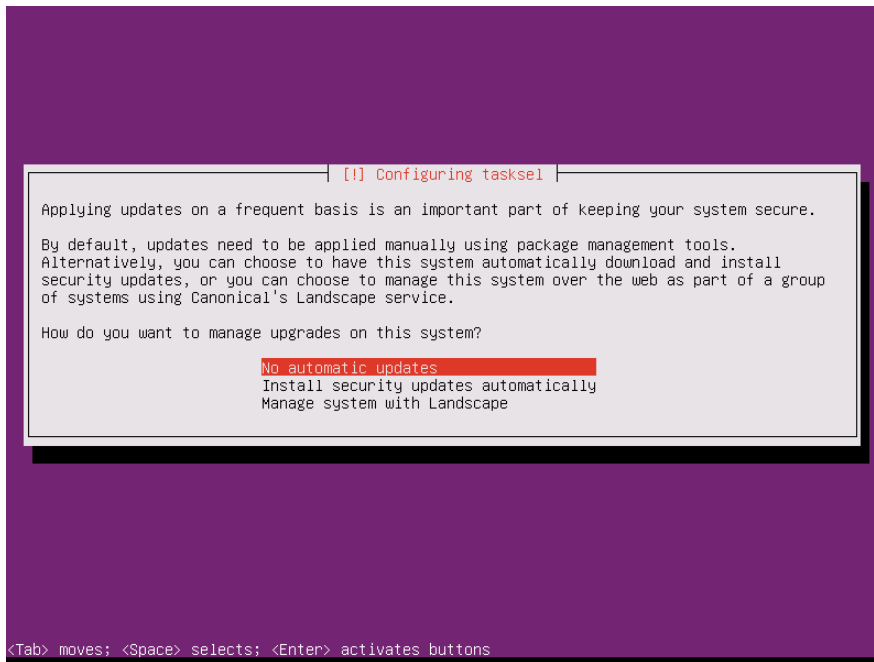
Installing Ubuntu 16.04 Server

16. In case your system is behind a proxy or a firewall use the next screen to bypass the network restrictions, otherwise **just leave it black and hit on Continue.**



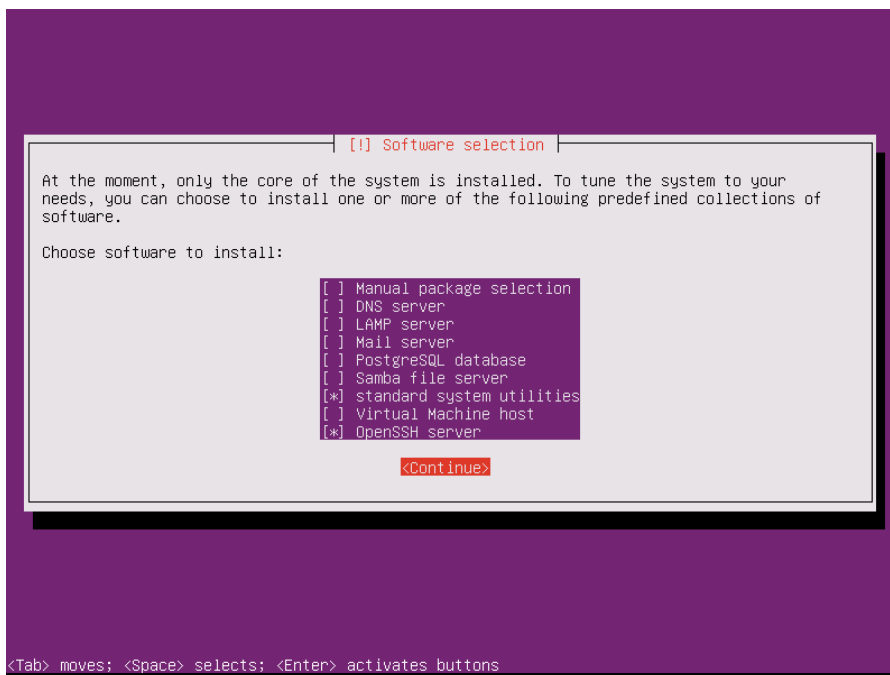
Configure System Package Manager

17. Next, the installer will configure **apt** repositories and will install the selected software. After it finishes the installation tasks a new screen will appear which will ask you how to manage the upgrade process. Select **No** automatic updates for now (you will manually select what updates are necessary) and hit **Enter** key to continue.



Manage Ubuntu 16.04 Upgrades **Install security updates automatically**

18. On the next step you will be asked to select what software to install. **Select only standard system utilities and OpenSSH server (if you require remote access)** by pressing the spacebar key and hit on **Continue**.



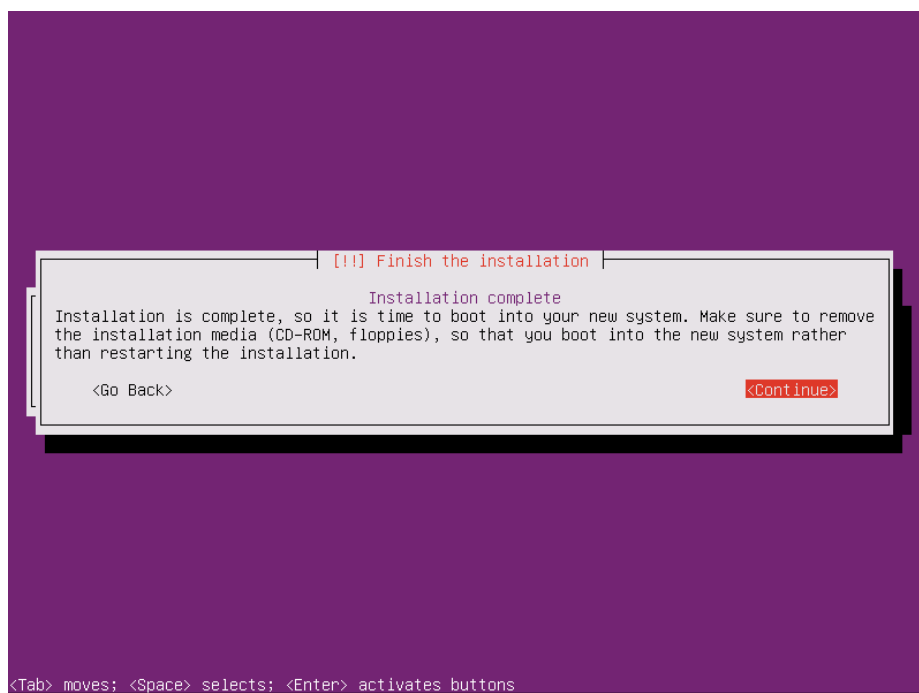
System Software Selection **Select standard system utilities and OpenSSH server because you require remote access**

19. Once the installer finishes installing the software, a new screen will prompt you whether to install the **Grub** boot loader to hard disk **MBR** (first **512** byte sector). Obviously without the GRUB you can't boot up your system after restart, so hit on **Yes** to continue with the installation.



Install Grub Boot Loader

20. Finally, after the boot loader is written to **Hard Disk MBR**, the installation process finishes. **Hit** on Continue to reboot the machine and remove the installation media.



Finish Ubuntu 16.04 Server Installation

21. After **reboot**, login to your system console using the credentials configured during the installation process and you're good to go on production with your server.

```
Ubuntu 16.04 LTS server01 tty1
server01 login: tecmint
Password:
Welcome to Ubuntu 16.04 LTS (GNU/Linux 4.4.0-18-generic x86_64)

 * Documentation:  https://help.ubuntu.com/

4 packages can be updated.
0 updates are security updates.

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

tecmint@server01:~$ lsb_release -a
No LSB modules are available.
Distributor ID: Ubuntu
Description:    Ubuntu 16.04 LTS
Release:        16.04
Codename:       xenial
cat /etc/issue.net
Ubuntu 16.04 LTS
tecmint@server01:~$ _
```

Ubuntu 16.04 Server Login Prompt

That's all! Keep in mind that this version of Ubuntu has official maintenance support from Canonical until **2021** for hardware, bugs, software and security updates.