AMD

Installing Ubuntu 14.04 and Windows® 7/8 in Dual-boot Mode

Installation Guide

Part Number: 55706_1.00

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1 Introduction

This document describes how to set up a “dual-boot” configuration on your system for Windows® and Ubuntu. Each operating system is installed and configured on a different partition.

Please contact your AMD Field Applications Engineer or technical representative with any questions about this document.

2 Installation Requirements

Before you begin the installation process, make sure that there is adequate space on your system's hard disk and that the following prerequisites are met:

- Boot mode is set to Native UEFI
- Internet connection is available
- Installation media is available:
  - Windows® 7/Windows® 8 installation disc
  - Ubuntu 14.04 LTS installation disc (also available for download from http://www.ubuntu.com)

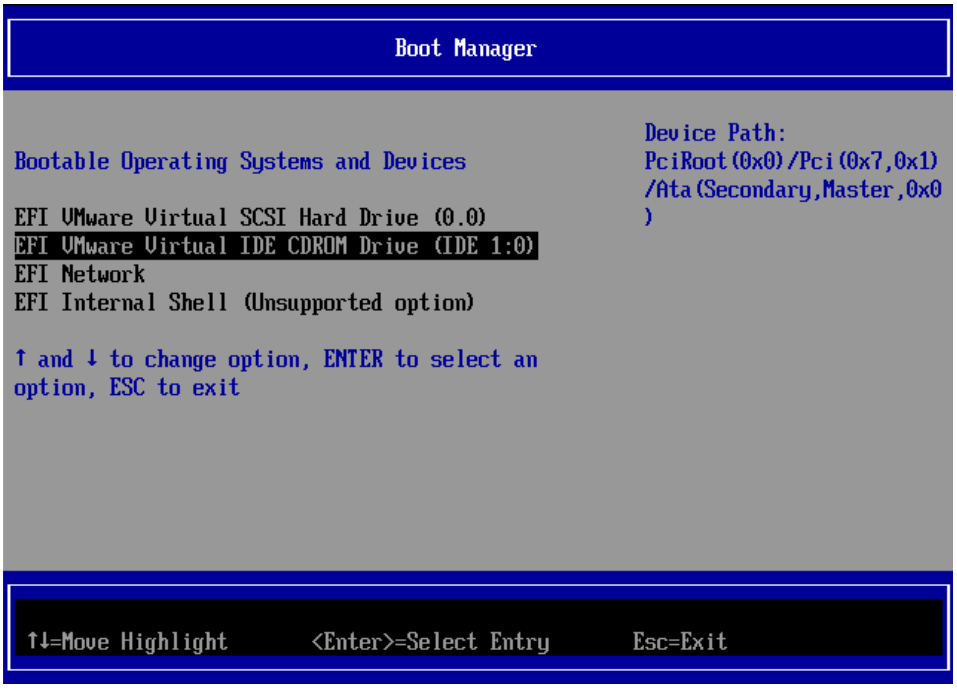
3 Installation Procedures

The following procedures describe how to install both Windows® and Ubuntu on your system. When both operating systems are correctly installed, a dual-boot menu should appear each time you start your system.

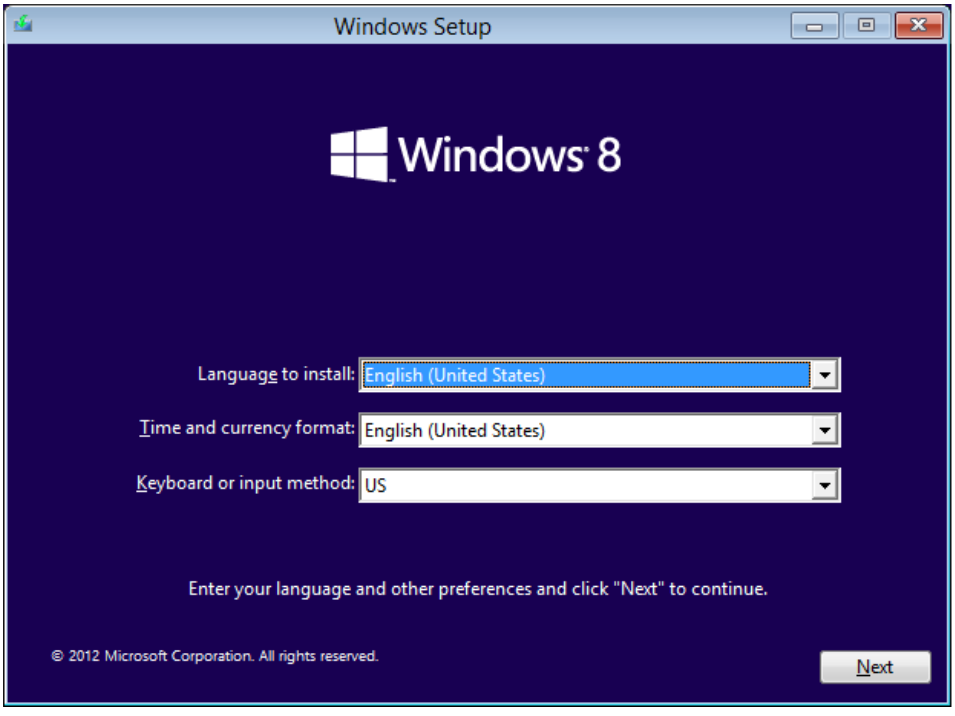
3.1 Installing Windows®

Complete the following steps to install Windows. For more detailed installation instructions, see the documentation that is available with your operating system.

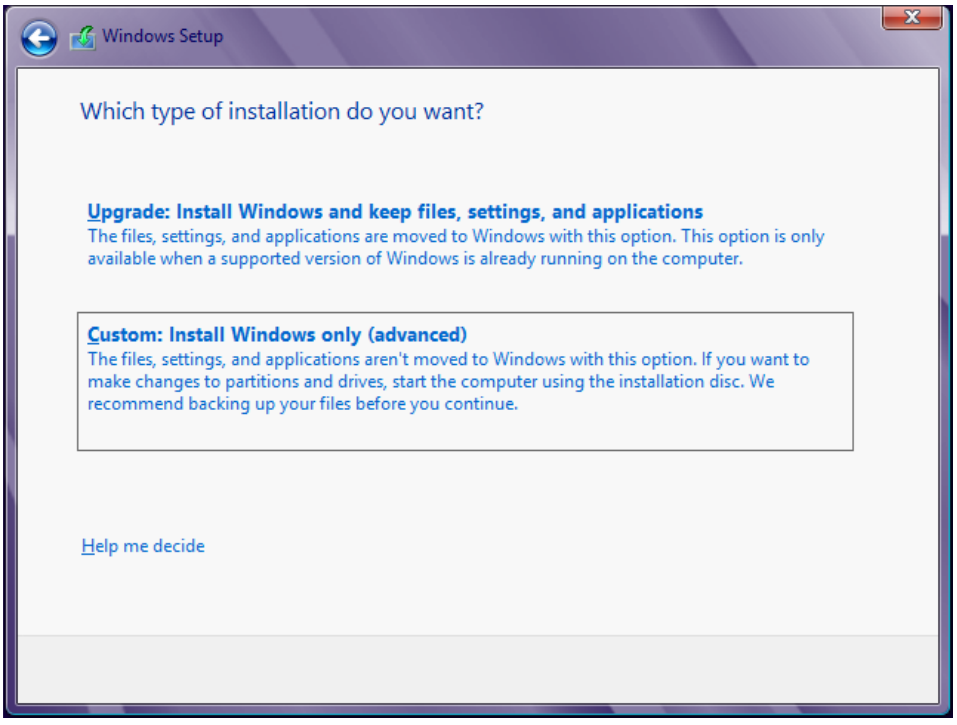
1. Insert the Windows installation CD into the CD-ROM drive, open **Boot Manager**, and boot your system using the UEFI CDROM option as shown below.



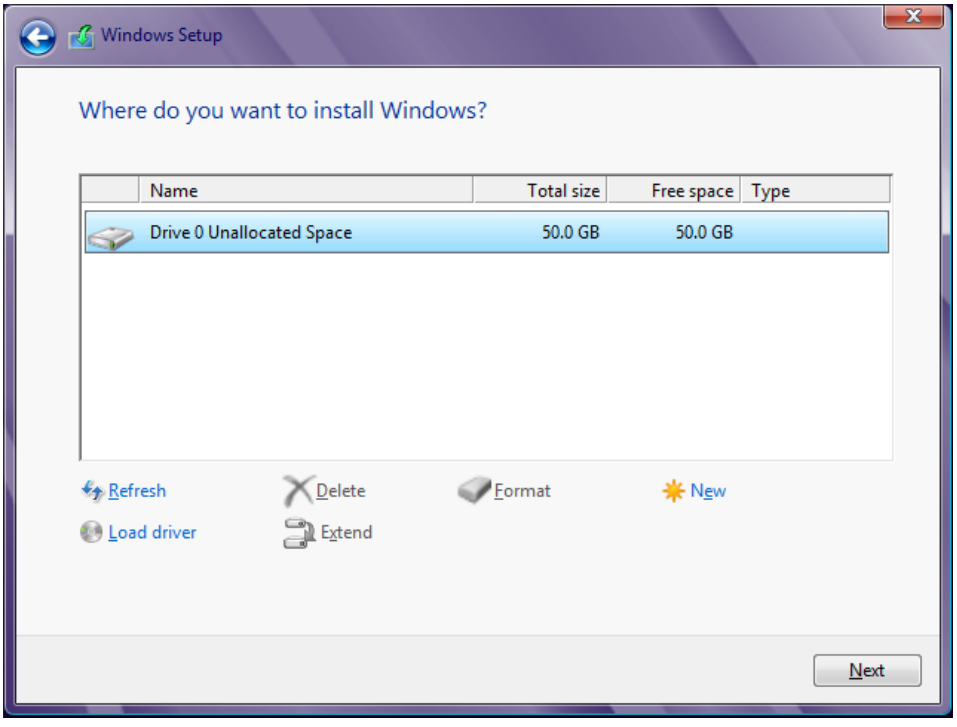
2. Select the appropriate language and click **Next**.



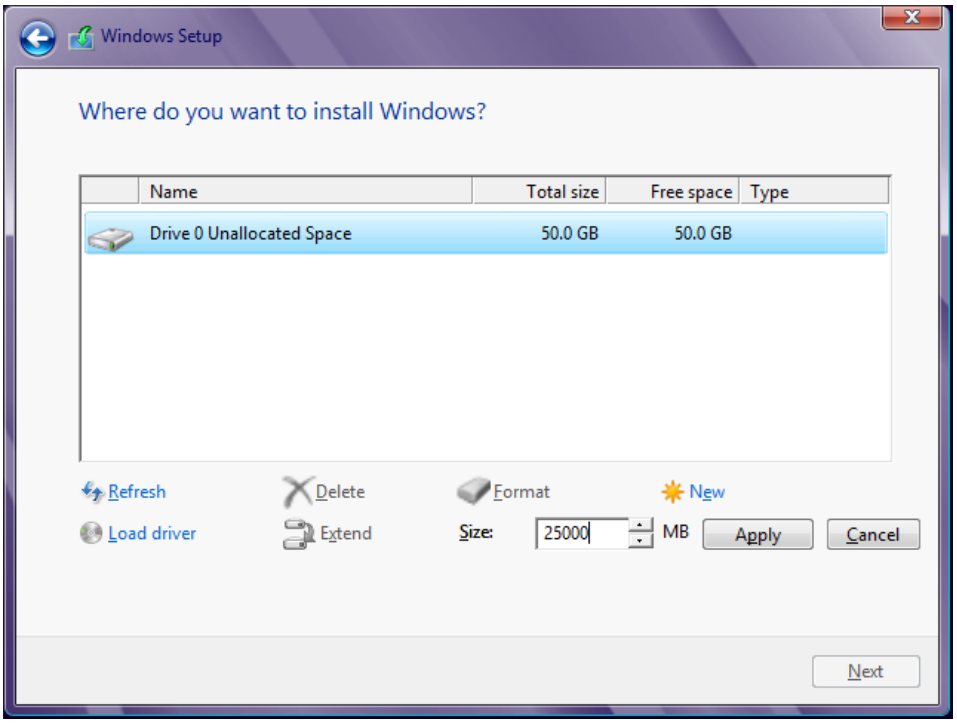
3. When prompted, select to install Windows only.



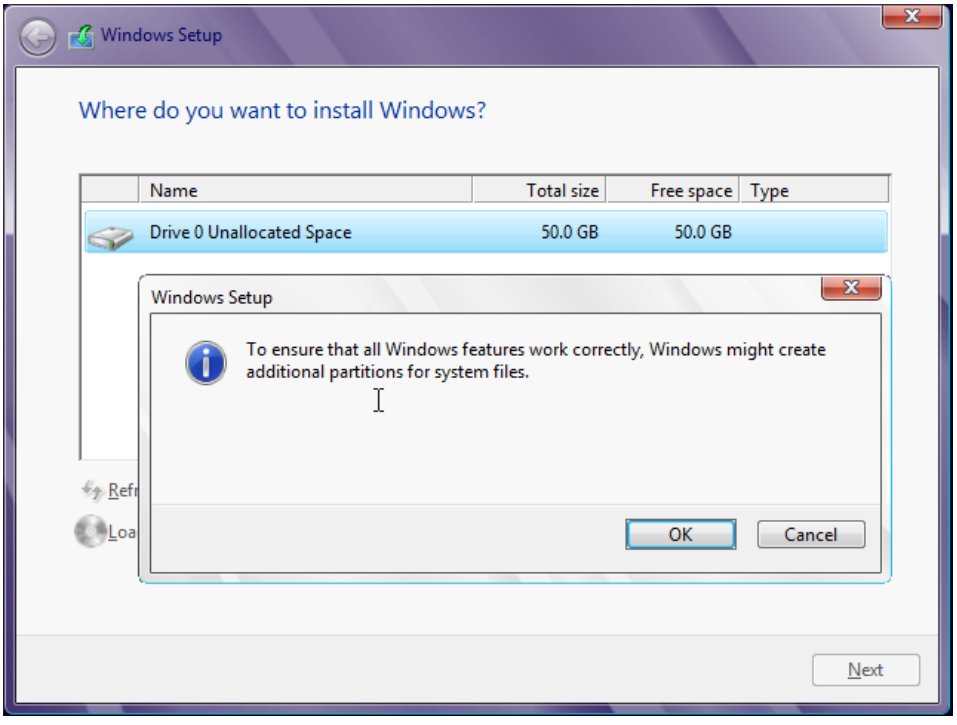
4. Delete all existing partitions, leaving the whole hard disk empty, and click **Next**.



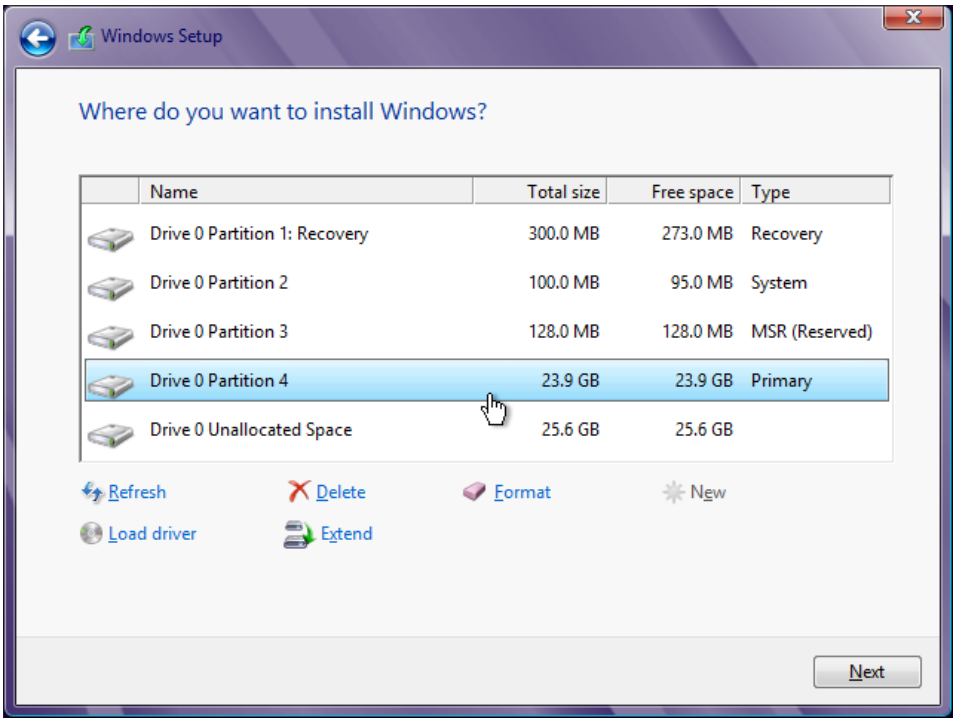
5. Create a new partition that is half the size of the hard disk.



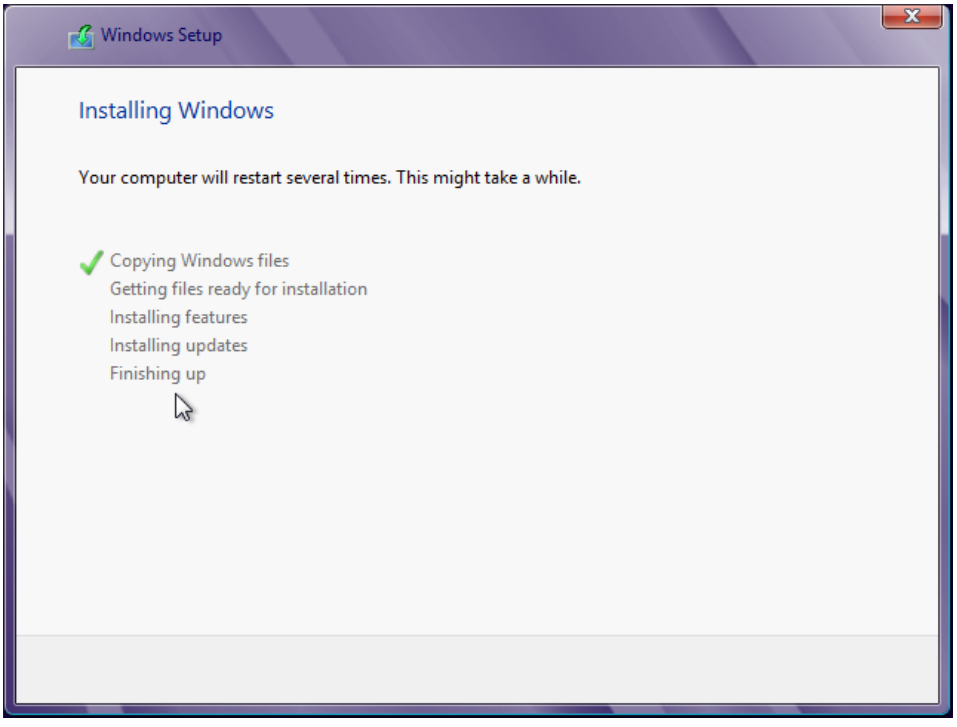
6. Click **OK** to allow additional partitions to be created by Windows as needed.



7. Make sure that the **Recovery**, **System**, **MSR**, and **Primary** partitions have been created, and click **Next** to continue with the installation.



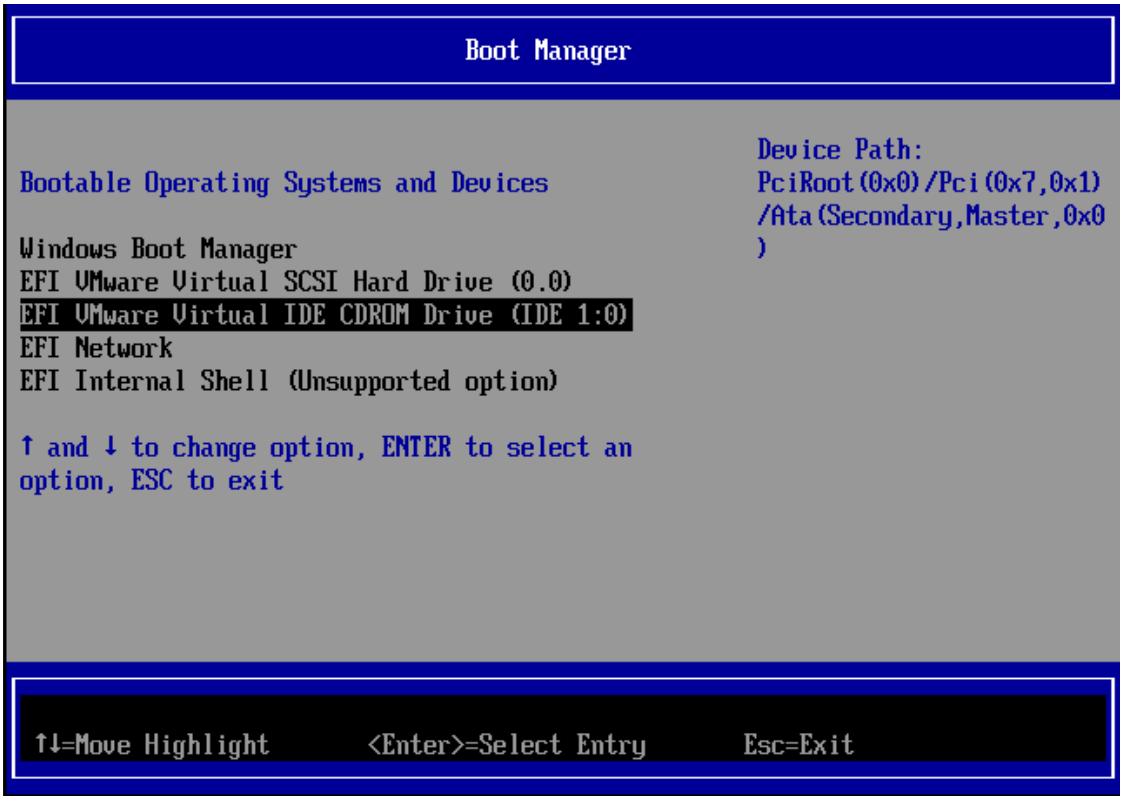
8. Complete all remaining installation steps until Windows is fully set up and running.



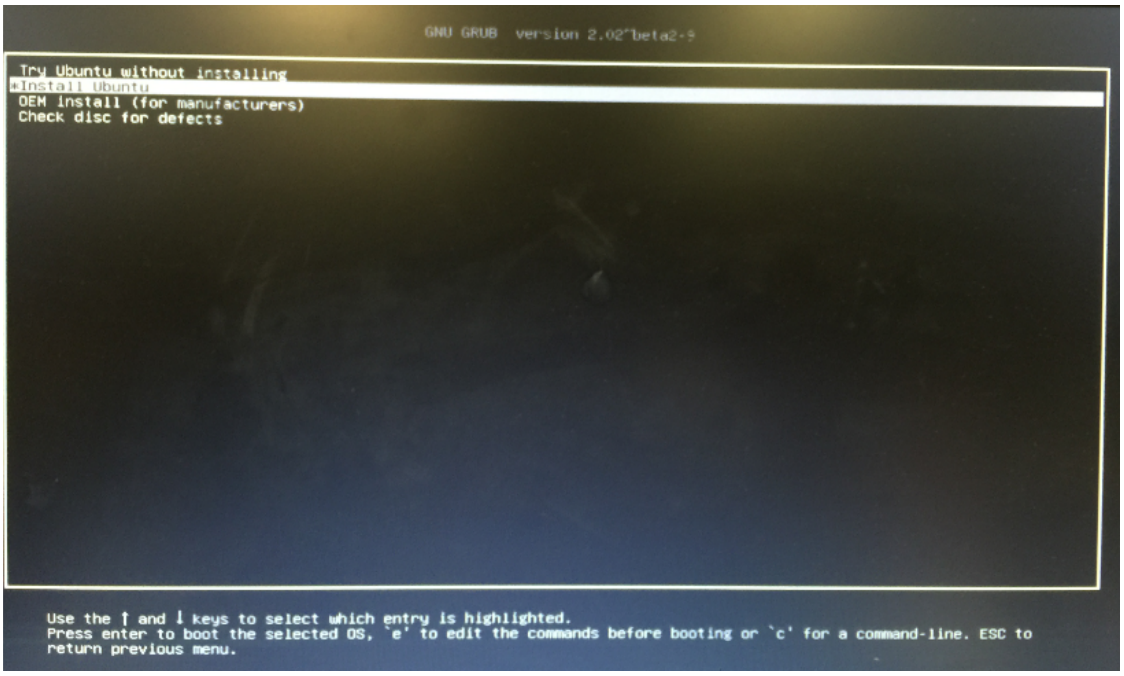
3.2 Installing Ubuntu

Complete the following steps to install Ubuntu. For more detailed installation instructions, see the documentation that is available with your operating system.

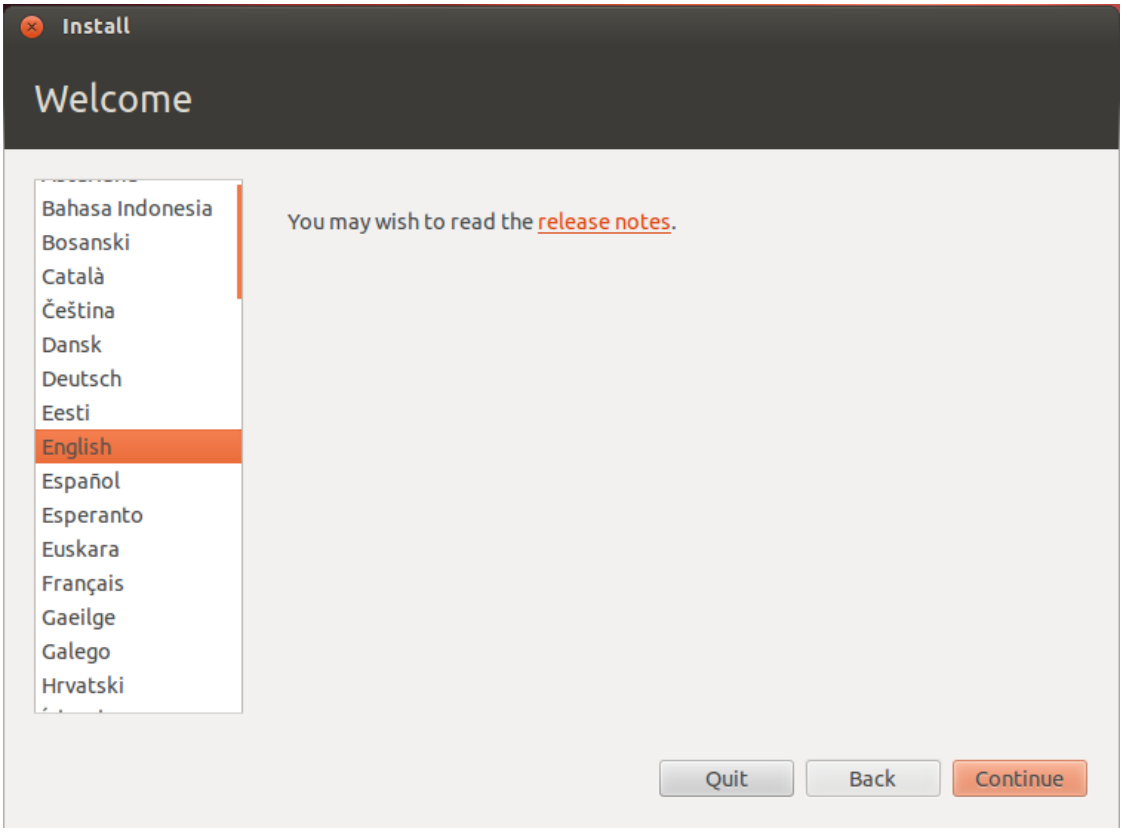
1. Insert the Ubuntu installation CD into the CD-ROM drive, open **Boot Manager**, and boot your system using the UEFI CDROM option as shown below.



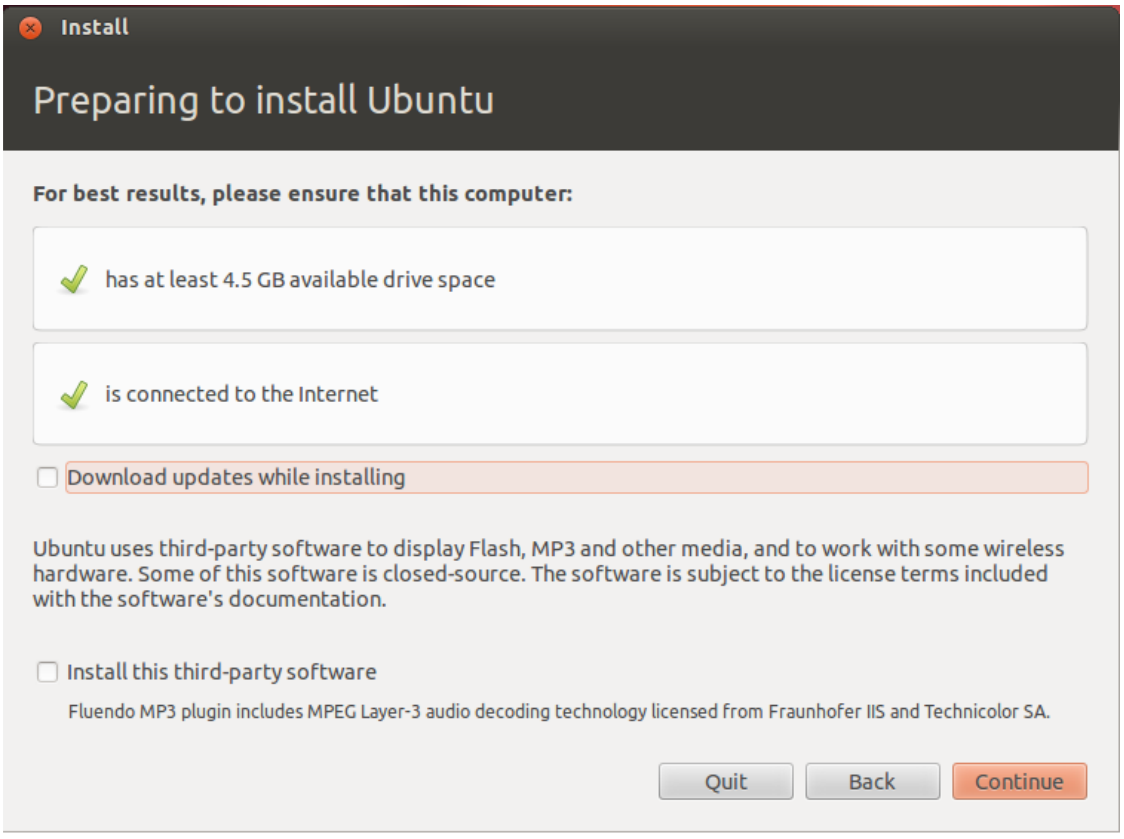
2. Select to install Ubuntu.



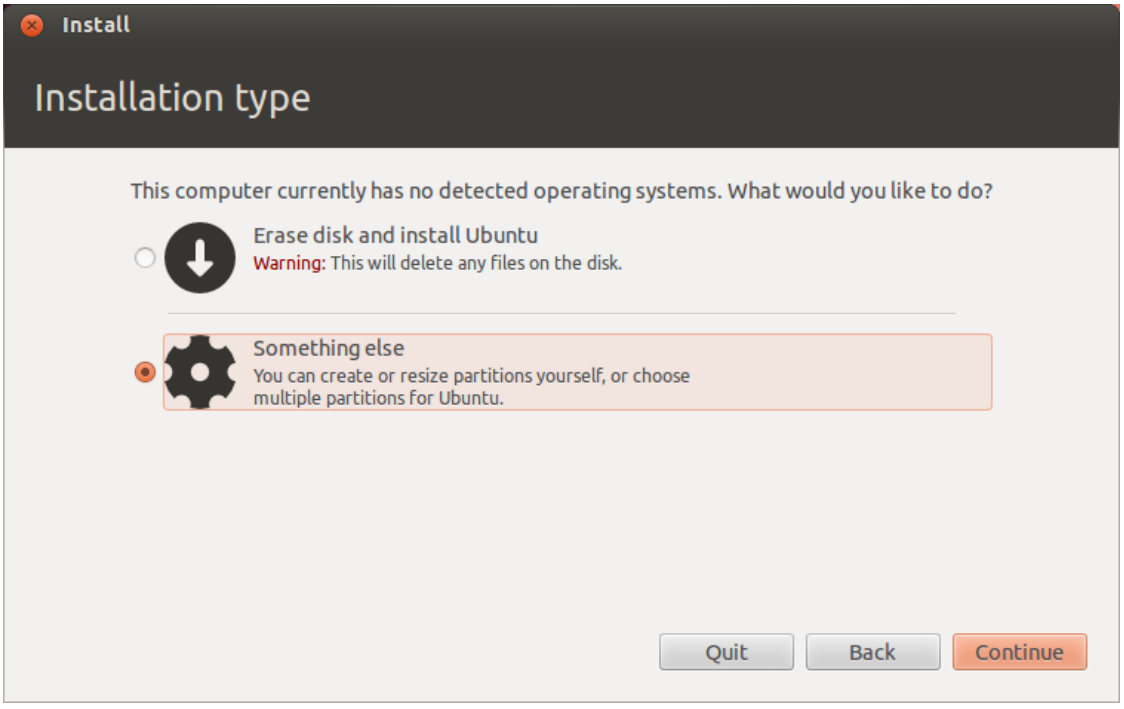
3. Select the appropriate language and click **Continue**.



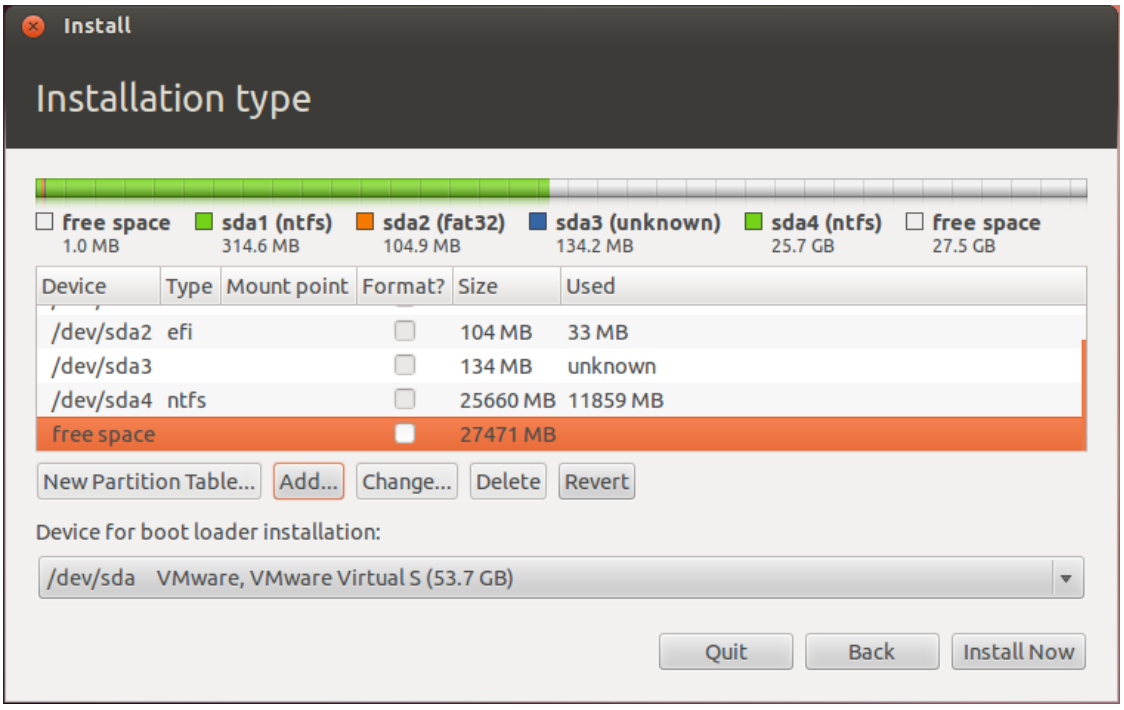
4. When prompted, click **Continue** to prepare the installation.



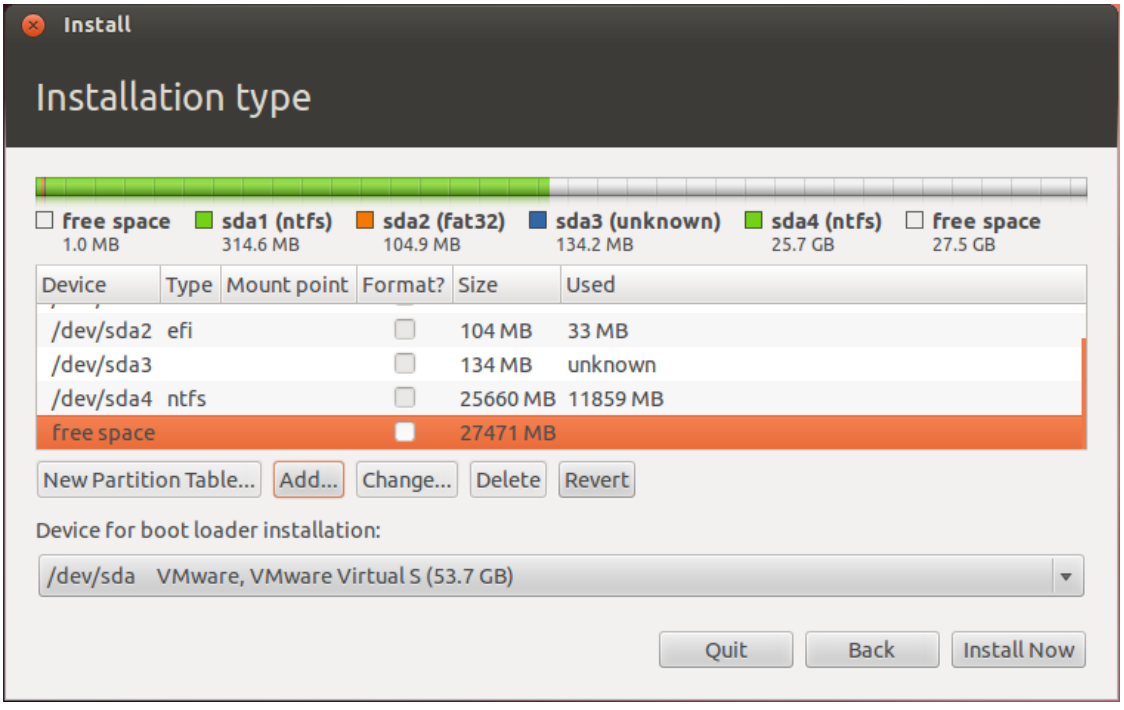
5. Select an installation type of **Something else** and click **Continue**.



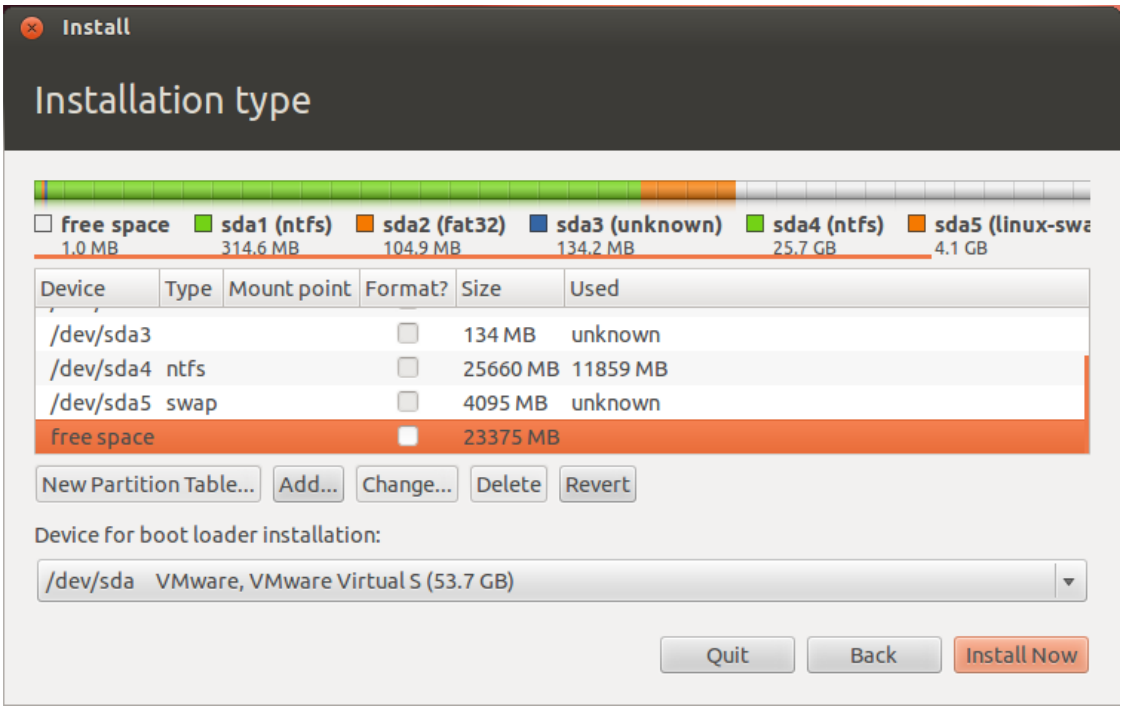
6. Create a partition for the installation by clicking **free space** followed by **Add**.



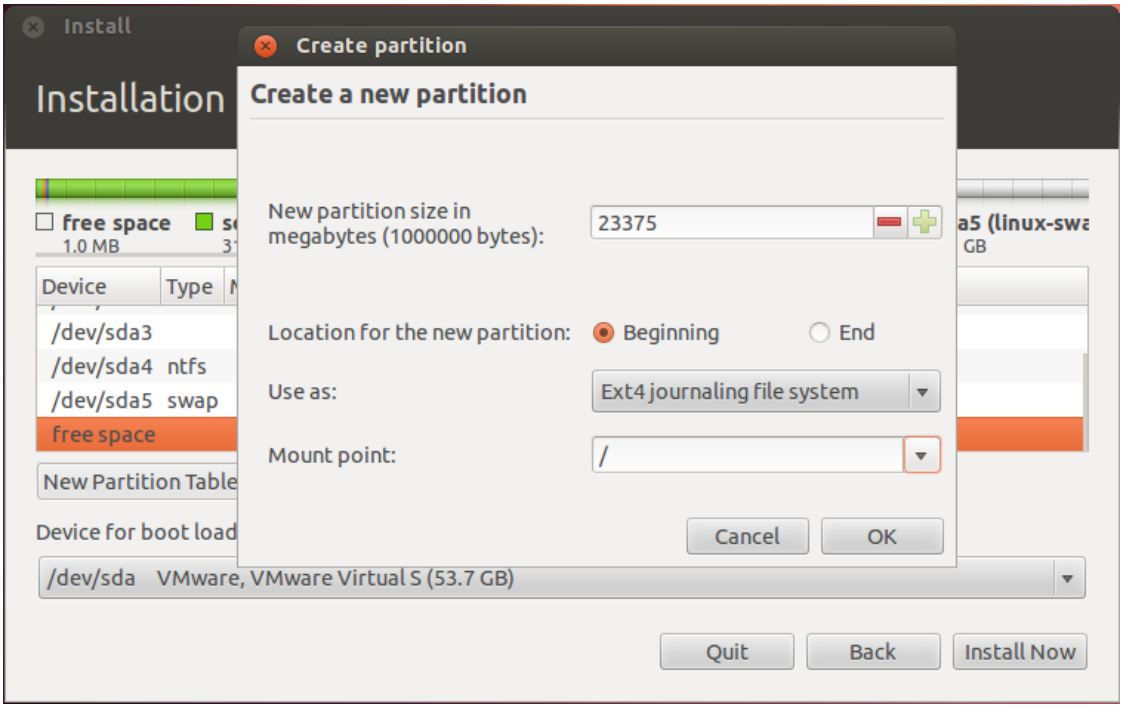
7. In the **Use as** field, select **swap area**. Specify a partition size that is the same as your physical memory size, e.g., 4096.



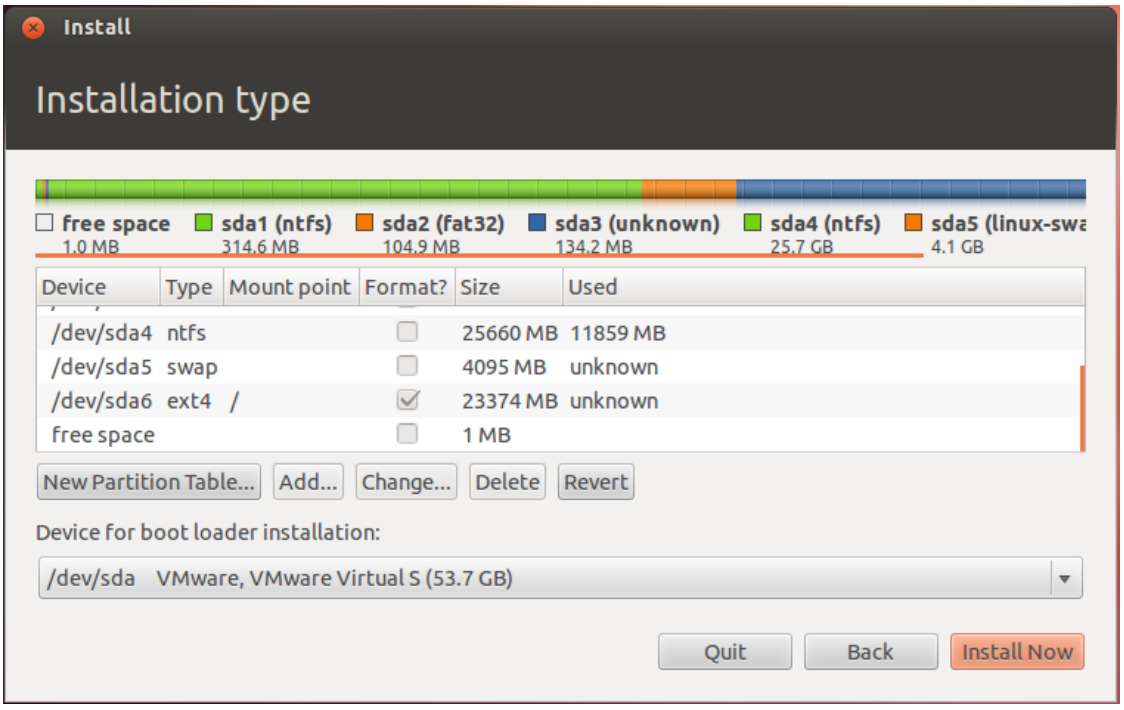
8. When the swap partition is created, it should appear as shown below. Create another partition by clicking **free space** followed by **Add**.



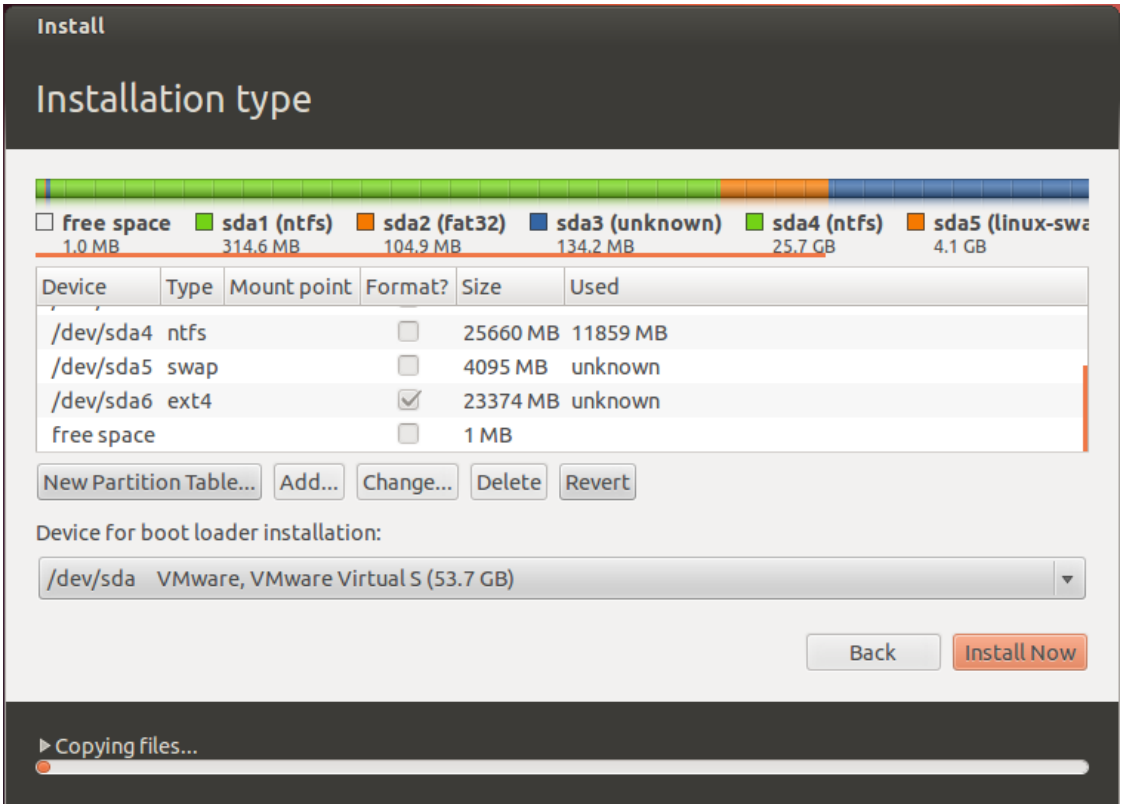
9. In the **Use as** field, select the Ext4 option and select **/** as the **Mount point**. Specify all remaining space as the partition size.



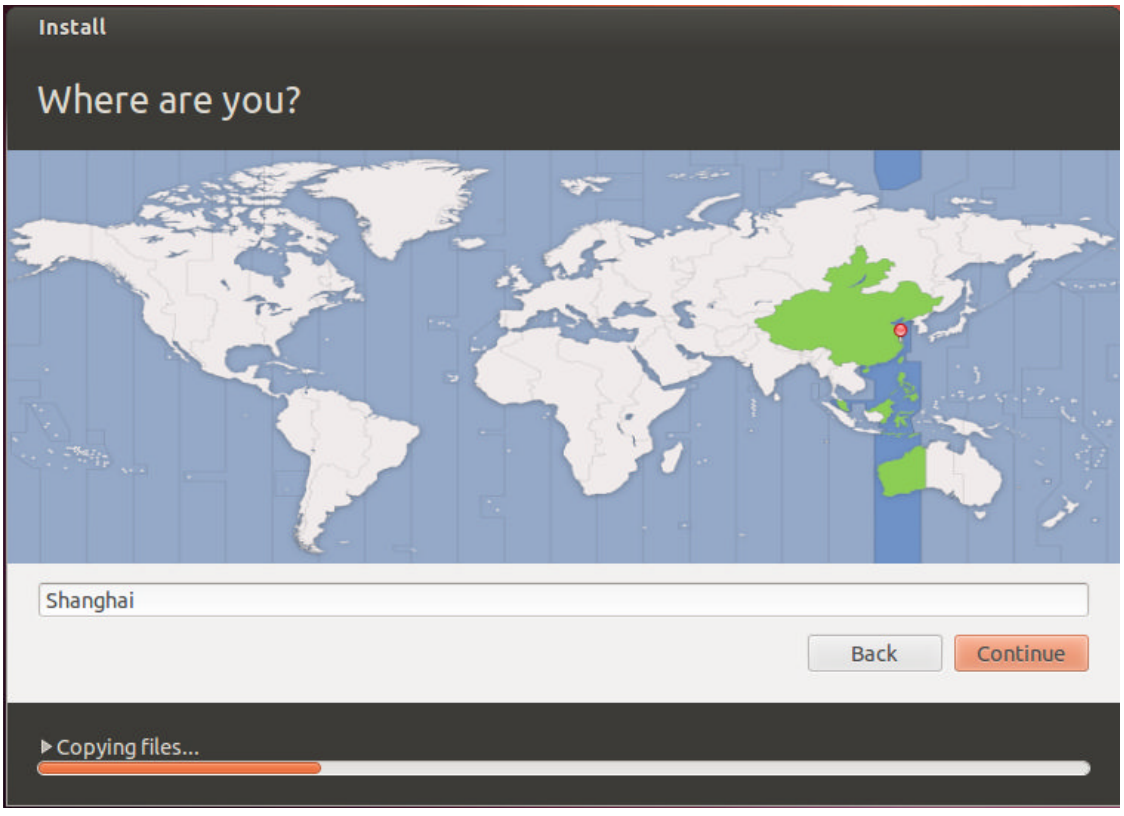
10. When the Ext4 partition is created, it should appear as shown below. Click **Install Now** to begin the installation.



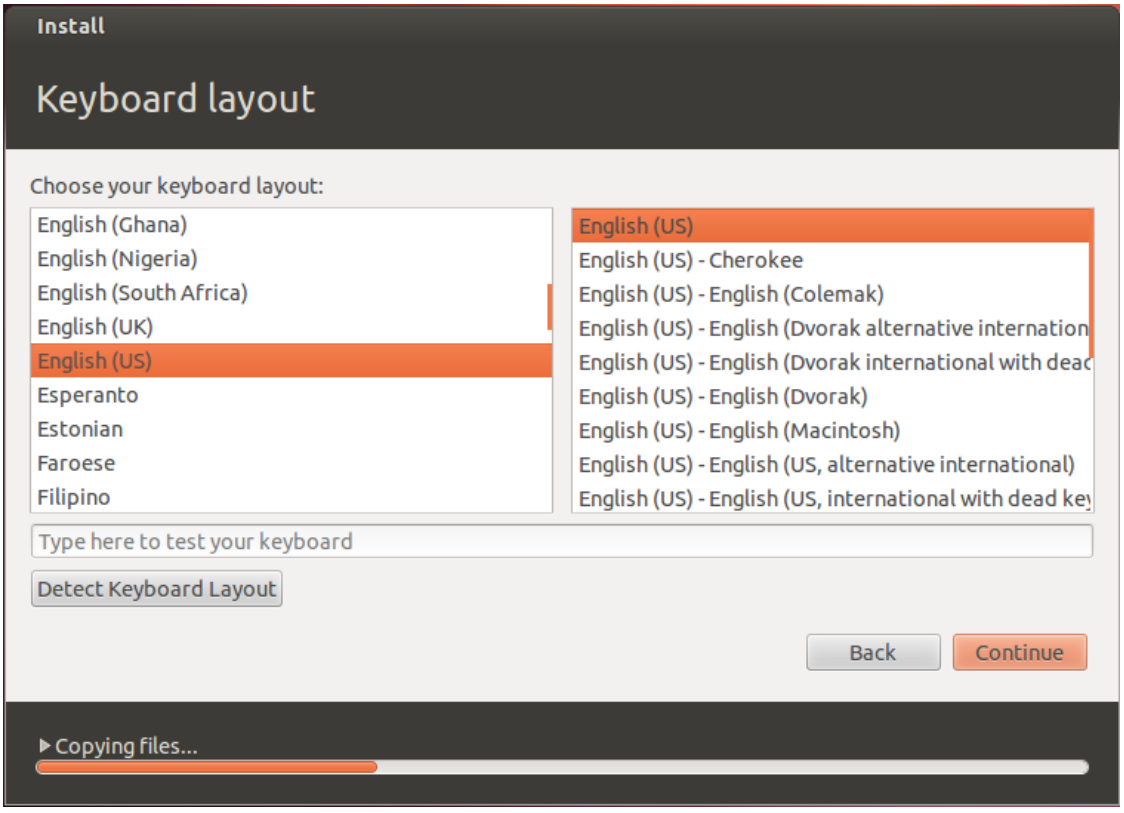
A status bar appears at the bottom of the window during installation as shown below.



11. When prompted, select your nearest location and click **Continue**.

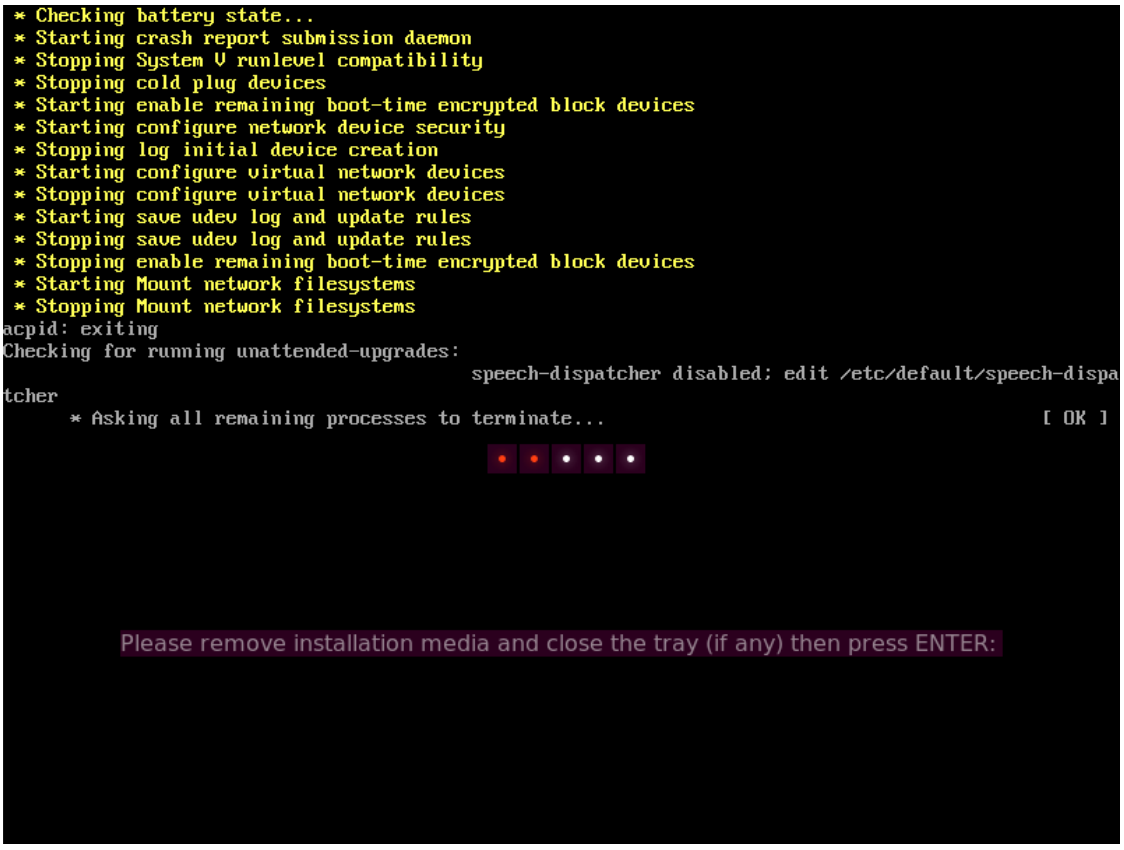


12. Select the appropriate keyboard layout and click **Continue**.

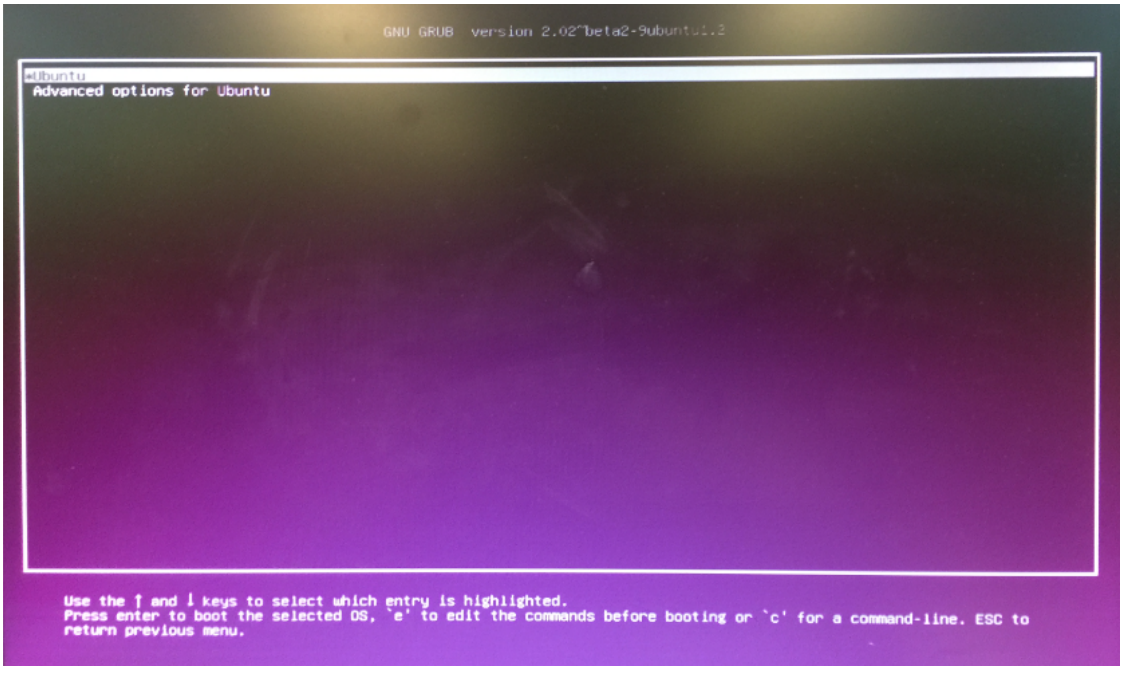


13. Provide your credentials as needed and click **Continue**.

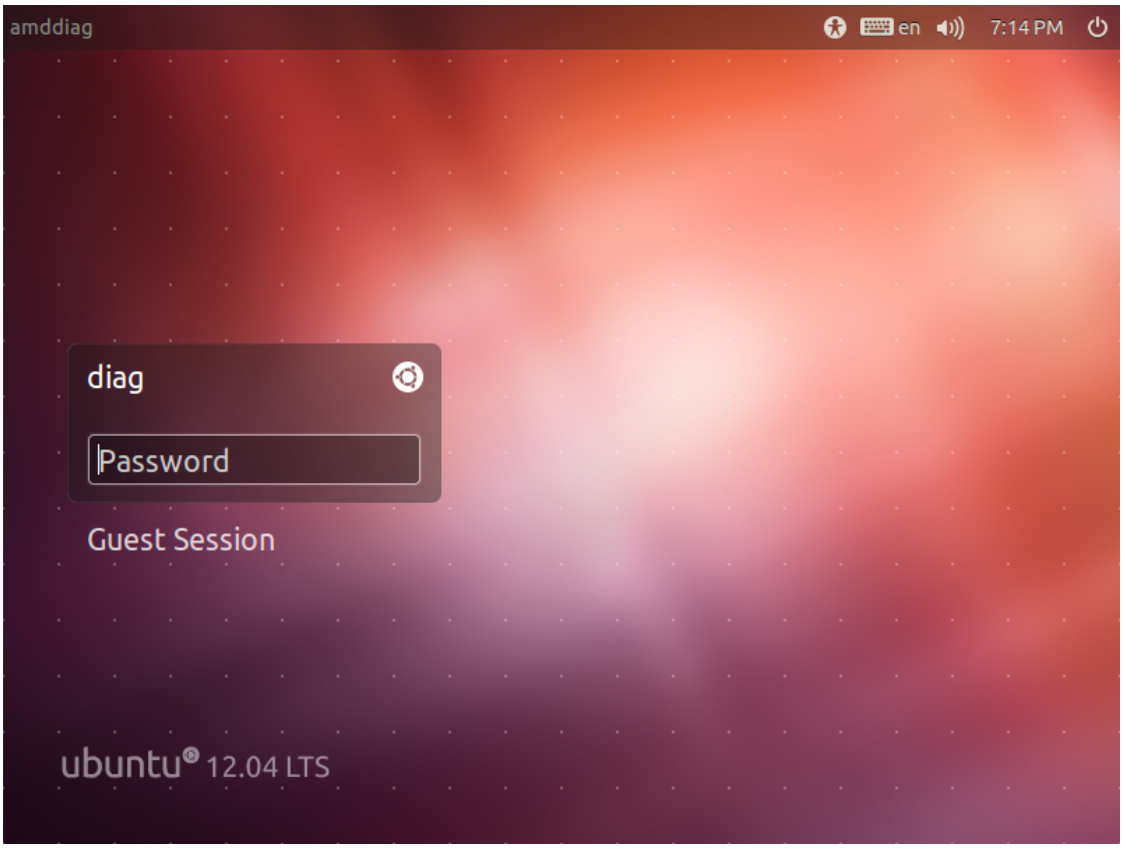
14. Once the installation is complete, remove the installation CD and press **Enter** to restart your system.



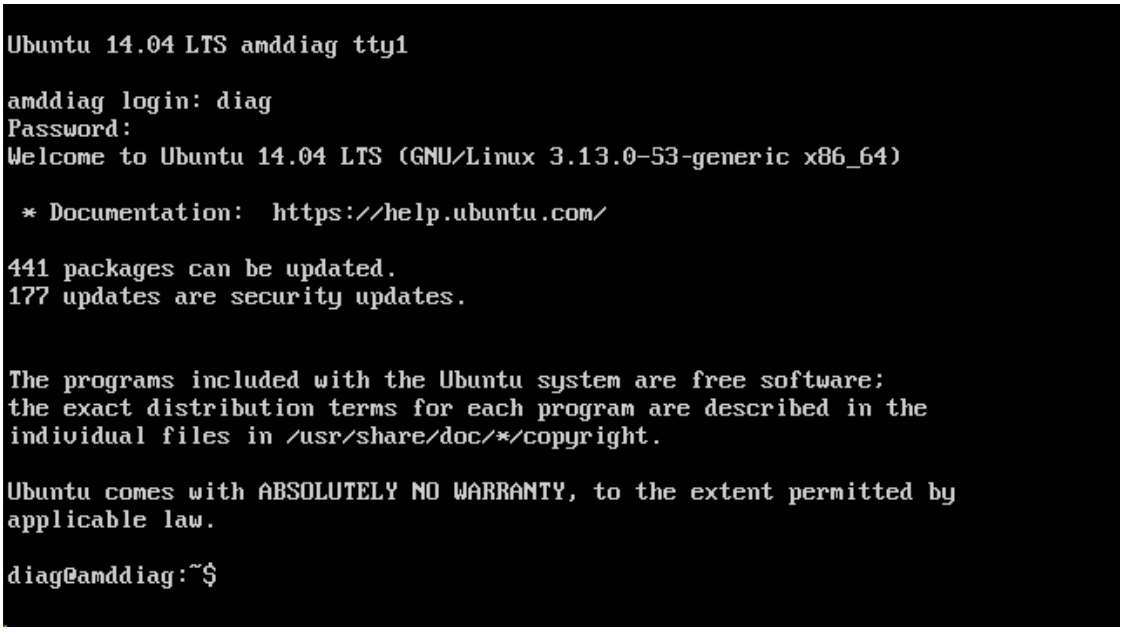
15. In the GRUB boot screen, select **Ubuntu** (Linux). Do not enter recovery mode.



16. When Ubuntu boots to GUI mode, as shown below, press **Ctrl + Alt + F1** to switch to text mode.



17. When in text mode, enter your credentials username and password as required.



18. Type **sudo passwd root** to change the root password.

```
diag@amddiag:~$ sudo passwd root
[sudo] password for diag:
Enter new UNIX password:
Retype new UNIX password:
passwd: password updated successfully
diag@amddiag:~$ _
```

19. Type **su -** to switch to root user.

```
diag@amddiag:~$ su -
Password:
root@amddiag:~# _
```

Note: All steps from this point must carried out by the root user. If the system restarts, make sure that you log on to the system with as the root user.

20. Do one of the following:

- Type **grub-probe --target=fs_uuid /boot/efi/efi/Microsoft/Boot/bootmgfw.efi** and record the output (for example, “EC8F-14C6” as shown below).

```
root@amddiag:~# grub-probe --target=fs_uuid /boot/efi/EFI/Microsoft/Boot/bootmgfw.efi
EC8F-14C6
root@amddiag:~# _
```

- Type **ls /dev/disk/by-uuid/ -l** and record the output (for example, “EC8F-14C6” which points to “../../sda2” as shown below).

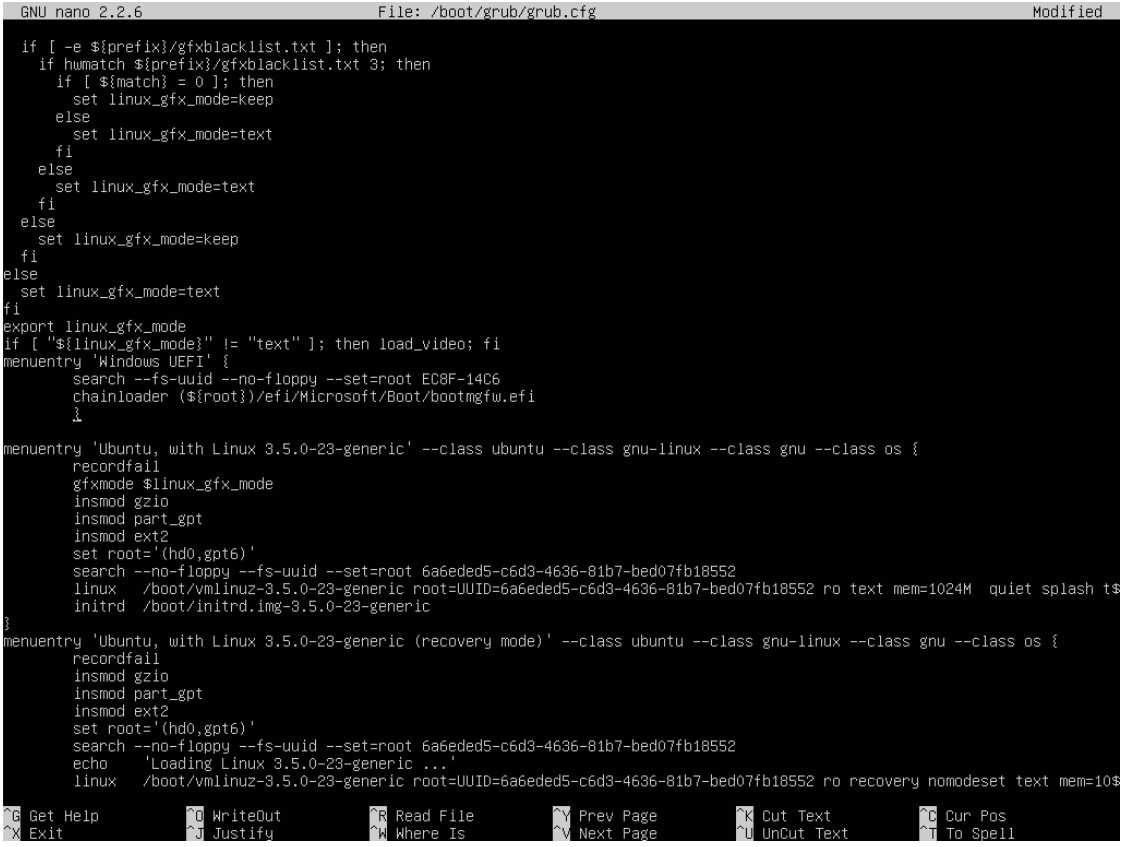
```
root@amddiag:~# ls /dev/disk/by-uuid/ -l
total 0
lrwxrwxrwx 1 root root 10 Aug  9 23:12 01ec39d3-e957-4feb-a82f-fbd7fb13992c -> ../../sda5
lrwxrwxrwx 1 root root 10 Aug  9 23:12 6a6eded5-c6d3-4636-81b7-bed07fb18552 -> ../../sda6
lrwxrwxrwx 1 root root 10 Aug  9 23:12 CE4AAEB54AAE9A2B -> ../../sda4
lrwxrwxrwx 1 root root 10 Aug  9 23:12 CEA48EB1A48E9B99 -> ../../sda1
lrwxrwxrwx 1 root root 10 Aug  9 23:12 EC8F-14C6 -> ../../sda2
root@amddiag:~#
```

21. Type “nano boot/grub/grub.cfg” and do the following:

- Find the first instance of **menuentry** and insert the following before it:

```
menuentry ‘Windows UEFI’ {
   search --fs-uuid --no-floppy --set=root EC8F-14C6
   chainloader (${root})/efi/Microsoft/Boot/bootmgfw.efi
}
```

- Replace “EC8F-14C6” with the output recorded in the previous step.
- Press **Ctrl + X** to exit and press **Y** to save your changes.



22. Reboot your system. The dual-boot menu should now appear.

Revision History

Rev 1.00 (December 2, 2015)

- Initial release.