

Installing Arch Linux on Oracle VM VirtualBox

Muhammad Shafeen - Lab Task 1

August 26, 2024

1 Introduction

This document describes the process of installing Arch Linux on a virtual machine using Oracle VM VirtualBox. The steps were performed on a Windows host system.

2 Creating the Virtual Machine

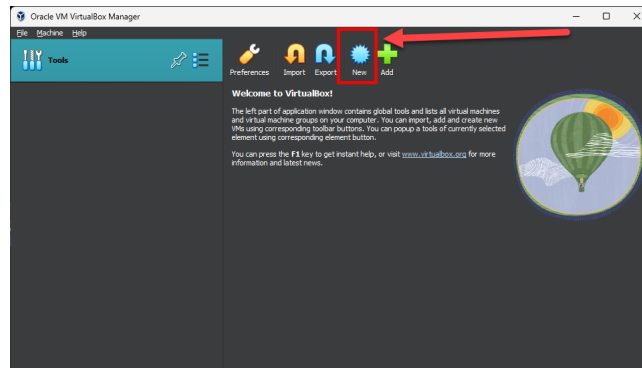


Figure 1: Starting the process to create a new virtual machine in VirtualBox.

First, we open Oracle VM VirtualBox and click the *New* button to create a new virtual machine.

3 Configuring the Virtual Machine

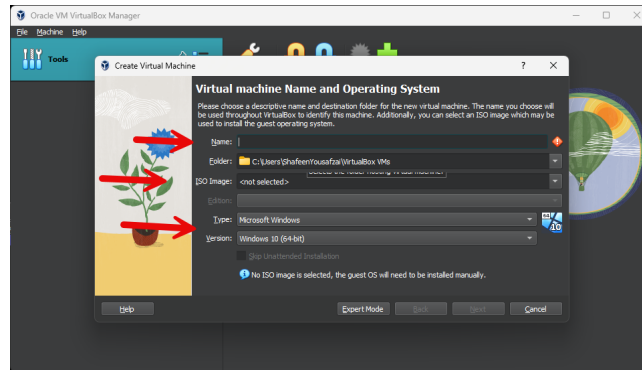


Figure 2: Initial configuration window for the new virtual machine.

Next, we proceed to the initial setup window for the virtual machine, where we input the machine's name, the location where it will be stored, and the type of operating system that will be installed.

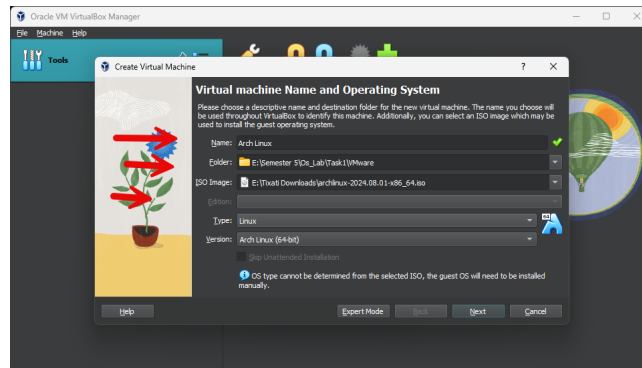


Figure 3: Filling in the details for the Arch Linux virtual machine.

We fill in the following details:

- Name: **Arch Linux**
- Folder: *Path to the virtual machine folder*
- ISO Image: *Path to the Arch Linux ISO file*
- Type: **Linux**
- Version: **Arch Linux (64-bit)**

4 Hardware Configuration

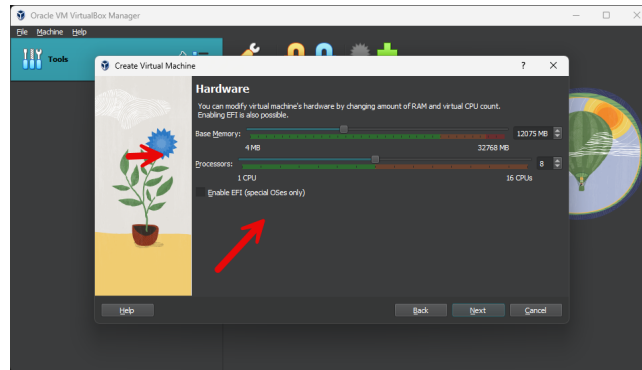


Figure 4: Configuring the hardware for the virtual machine.

We then configure the virtual machine's hardware as follows:

- Base Memory: **12075 MB (12 GB)**
- Processors: **8 CPUs**
- EFI: **Not enabled**

5 Virtual Hard Disk Setup

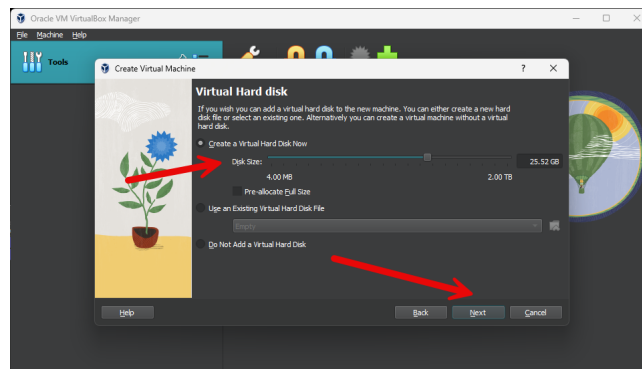


Figure 5: Setting up the virtual hard disk.

Next, we configure the virtual hard disk with a size of **25.52 GB** and opt to create a new virtual hard disk.

6 Summary and Finalization

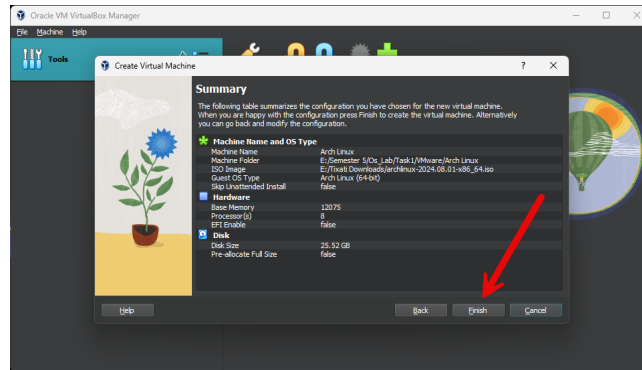


Figure 6: Summary of the virtual machine settings.

After configuring the hardware and disk, we review the settings and click *Finish* to complete the creation of the virtual machine.

7 Starting the Virtual Machine

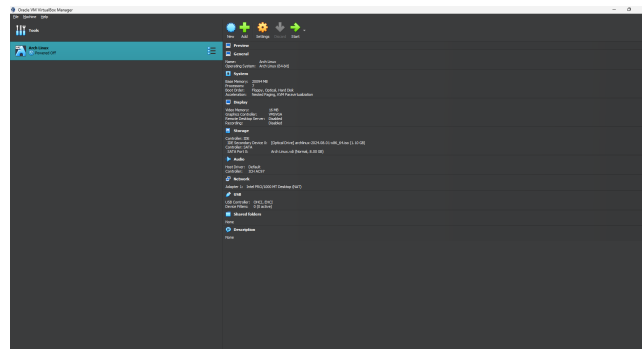
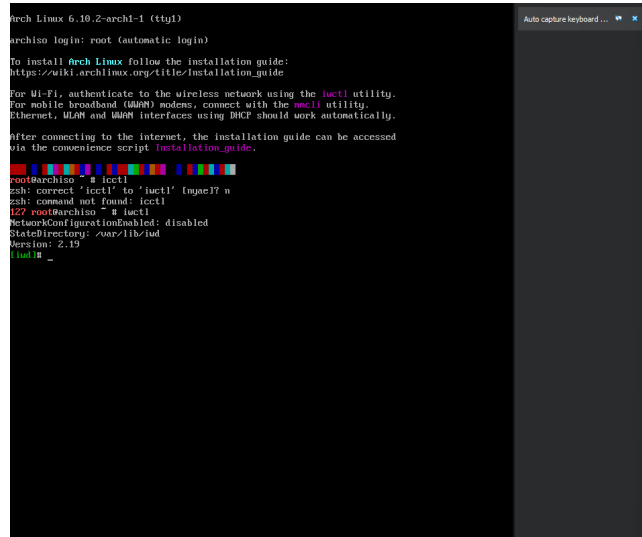


Figure 7: VirtualBox Manager showing the newly created Arch Linux virtual machine.

With the virtual machine created, it is now listed in the VirtualBox Manager, but it is currently powered off.

8 Installing Arch Linux

A screenshot of a terminal window showing the Arch Linux installation process. The terminal has a dark background with white and green text. At the top, it says 'Arch Linux 6.10.2-arch1-1 (tty1)'. Below that, it says 'archiso login: root (automatic login)'. Then, it provides instructions on how to install Arch Linux, including a link to the installation guide. The user enters the command 'iuctl', which is corrected to 'iuctl' (though the screenshot shows a typo correction from 'iuctl' to 'iuctl'). The user then enters 'iuctl' again, and the terminal shows 'NetworkConfigurationEnabled: disabled' and 'StateDirectory: /var/lib/iud'. The prompt changes to 'iud#'.

```
Arch Linux 6.10.2-arch1-1 (tty1)
archiso login: root (automatic login)

To install Arch Linux follow the installation guide:
https://wiki.archlinux.org/title/installation_guide

For Wi-Fi, authenticate to the wireless network using the iuctl utility.
For mobile broadband (4G/LTE) modems, connect with the mcli utility.
Ethernet, WLAN and WWAN interfaces using DHCP should work automatically.

After connecting to the Internet, the installation guide can be accessed
via the convenience script installation_guide.

root@archiso ~ # iuctl
bash: correct 'iuctl' to 'iuctl' [maybe] n
bash: command not found: iuctl
root@archiso ~ # iuctl
NetworkConfigurationEnabled: disabled
StateDirectory: /var/lib/iud
Version: 2.15
iud#
```

Figure 8: Arch Linux command line interface.

We start the virtual machine and are greeted with the Arch Linux command line. Here, we enter various setup commands to configure the network and begin the installation.

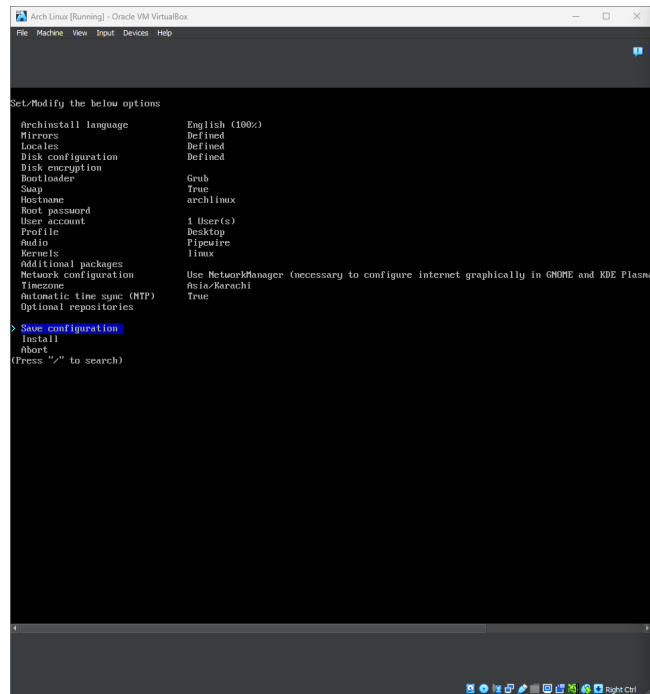


Figure 9: Arch Linux installation setup.

We navigate through the Arch Linux installation menu, configuring necessary options such as language, mirrors, and disk configuration.

9 Booting into Arch Linux

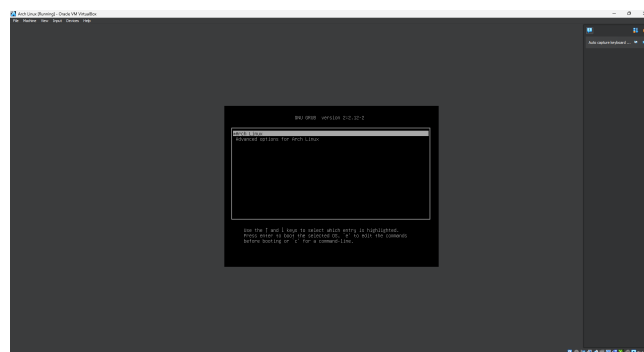


Figure 10: GRUB bootloader for Arch Linux.

Finally, the GRUB bootloader appears, indicating that Arch Linux is successfully installed and ready to be booted.

10 Initial Setup After Installation

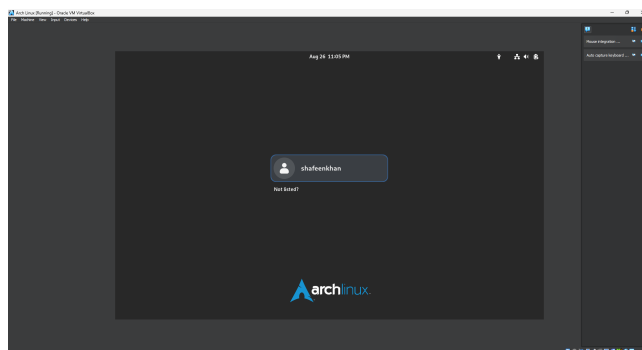


Figure 11: Arch Linux login screen.

We are now presented with the login screen of Arch Linux, showing that the installation was successful and the system is operational.

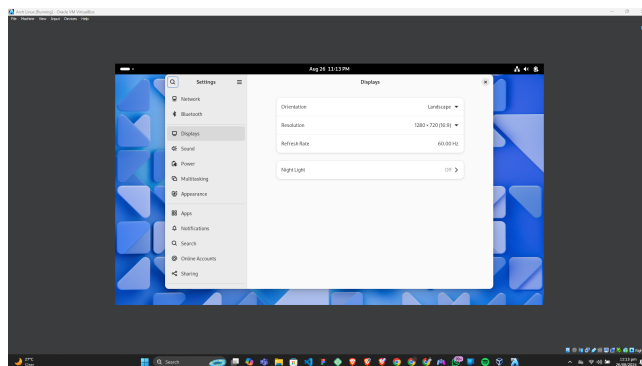


Figure 12: Configuring display settings in Arch Linux.

After logging in, we proceed to configure the display settings, adjusting the resolution, orientation, and other display parameters.

11 Conclusion

The steps outlined in this document successfully demonstrate the process of setting up and installing Arch Linux in Oracle VM VirtualBox. We configured

the virtual machine's hardware, created a virtual hard disk, and completed the installation of Arch Linux. The system was successfully booted, and initial setup tasks were performed.