

INSTALLATION OF KALI LINUX AND WINDOWS IN ORACLE VIRTUAL BOX

TABLE OF CONTENT

- System Requirements
- Installation Prerequisites
- Preparing for the Installation
- Kali Linux Installation Procedure
 - Boot
 - Language
 - Network
 - User Accounts
 - Clock
 - Disk
 - Boot Information
 - Reboot

1. Introduction

Kali Linux is a Debian-based Linux distribution widely used for penetration testing, ethical hacking, and cybersecurity research. This project documents the step-by-step process of installing Kali Linux on Oracle VirtualBox, a popular virtualization platform, to create a safe and isolated environment for cybersecurity training.

Installation Prerequisites

This guide will make also the following assumptions when installing Kali Linux:

- Install Oracle VirtualBox on a host machine.
- Configure a virtual machine (VM) for Kali Linux.
- Perform a guided installation of Kali Linux.
- Verify successful installation and basic functionality

Setting up Virtual Box

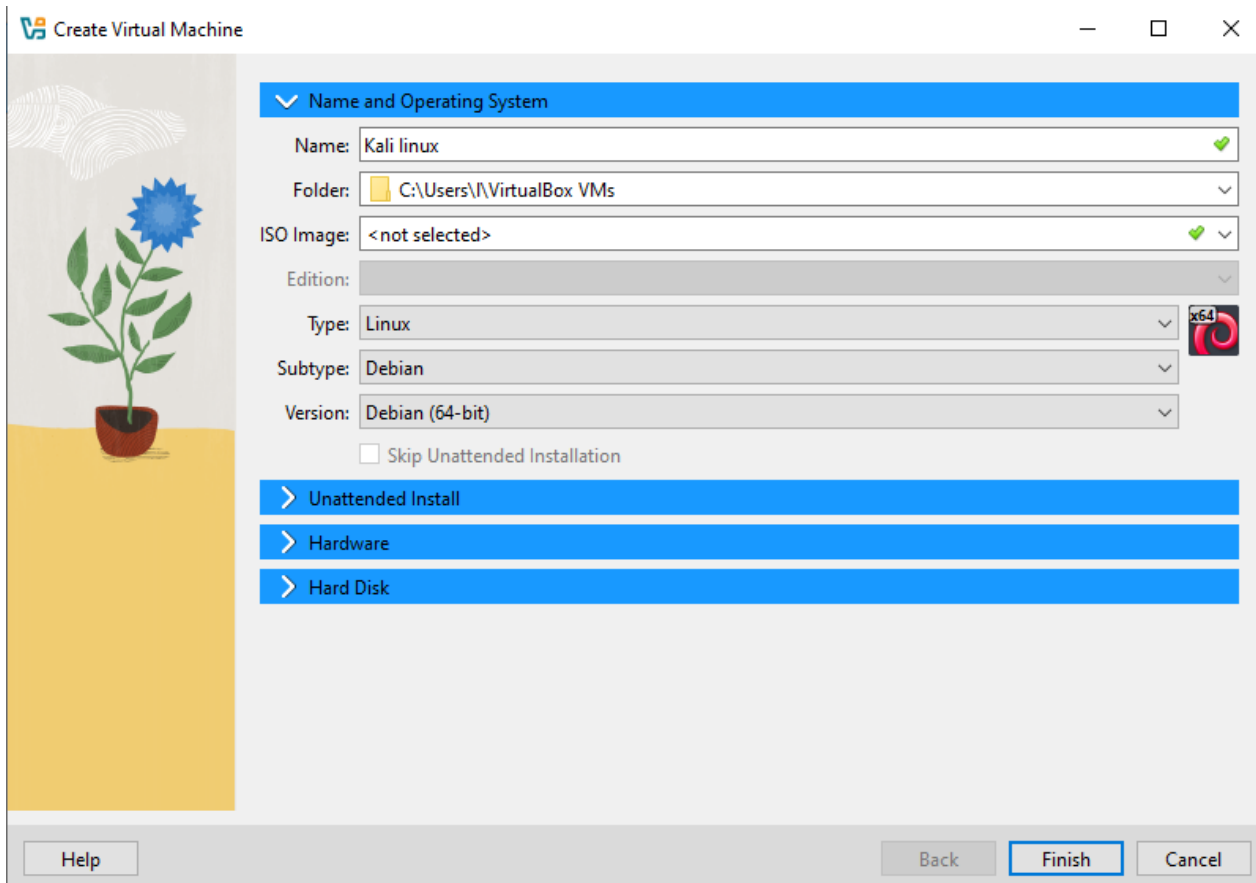
1. Download & Install Virtual Box

- Obtain VirtualBox from [oracle](https://www.oracle.com/virtualization/technologies/virtual-box-downloads.html).
- Follow the installation wizard to complete setup.

2. Create a New Virtual Machine

- Open VirtualBox and click **New**.
- Enter the VM name: "**Kali Linux**".
- Select **Type: Linux** and **Version: Debian (64-bit)**.

- Allocate **4 GB RAM** and **2 CPU cores**.



Create Virtual Machine

▼ Name and Operating System

Name:

Folder:

ISO Image:

Edition:

Type:

Subtype:

Version:

☐ Skip Unattended Installation

> Unattended Install

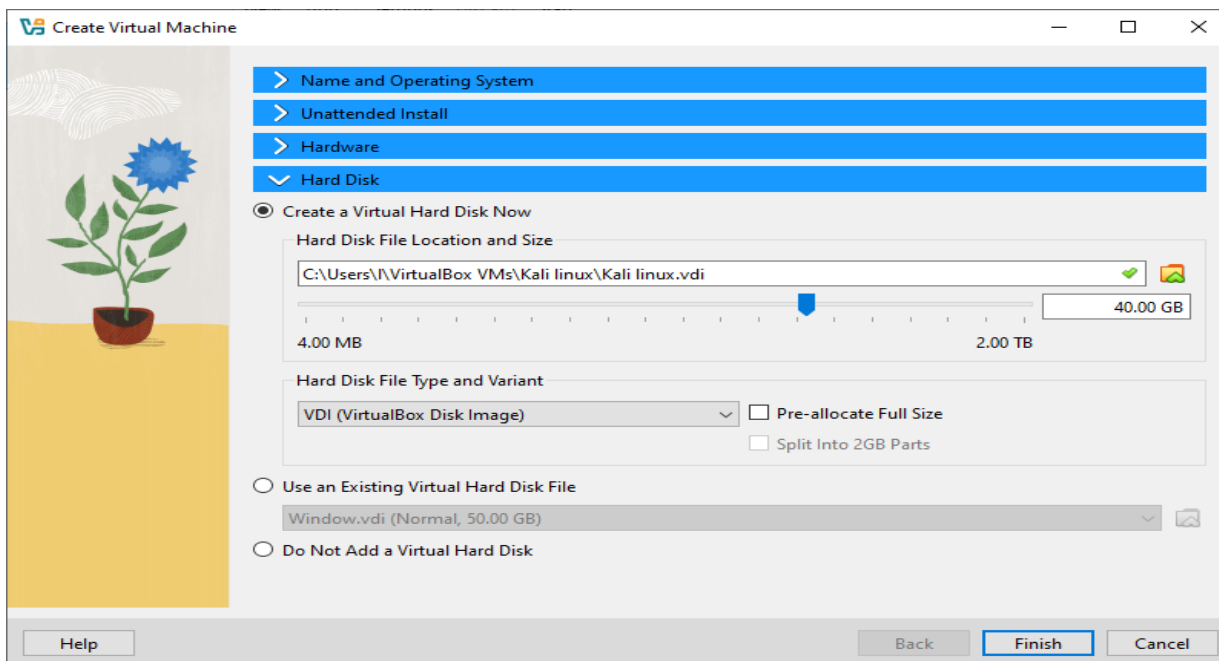
> Hardware

> Hard Disk

Help Back Finish Cancel

Configure Virtual Hard Disk

- Select "Create a virtual hard disk now".
- Choose **VDI (VirtualBox Disk Image)**.
- Allocate **40 GB** (dynamic allocation recommended).



Create Virtual Machine

> Name and Operating System

> Unattended Install

> Hardware

▼ Hard Disk

☒ Create a Virtual Hard Disk Now

Hard Disk File Location and Size

40.00 GB

4.00 MB 2.00 TB

Hard Disk File Type and Variant

☐ Pre-allocate Full Size

☐ Split Into 2GB Parts

☐ Use an Existing Virtual Hard Disk File

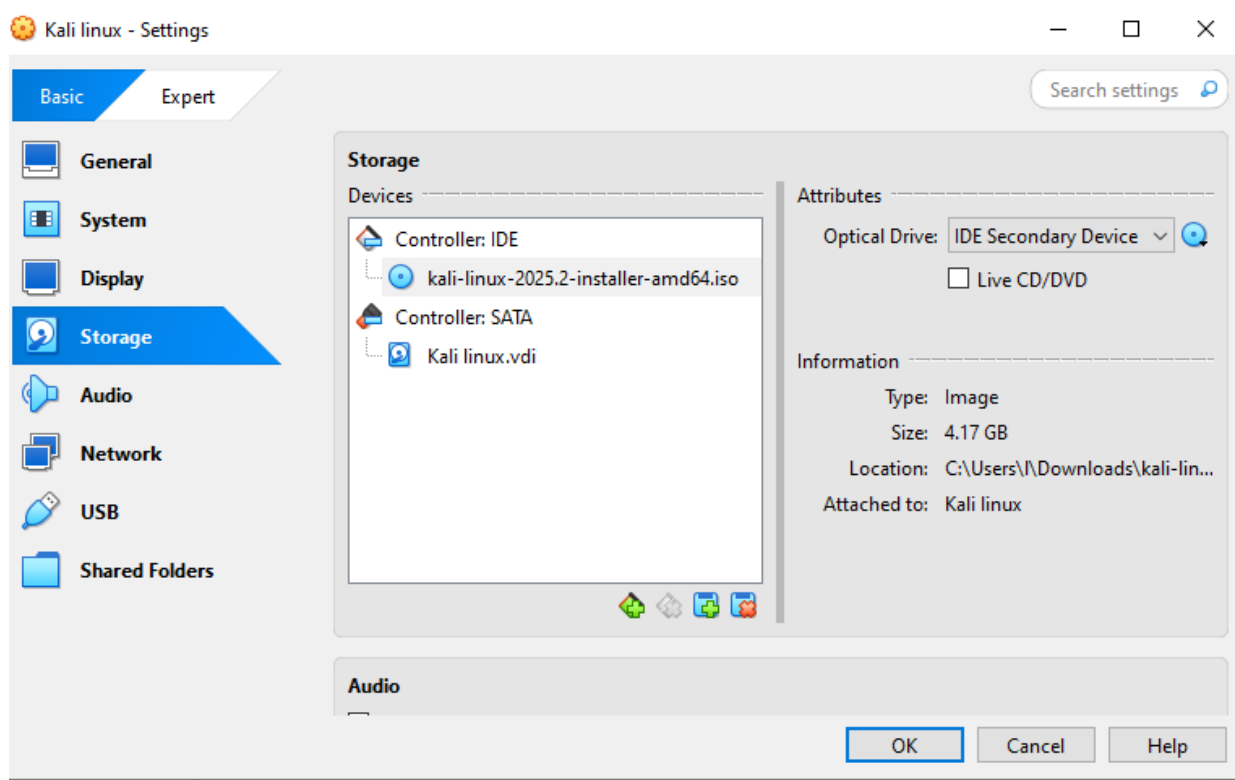
☐ Do Not Add a Virtual Hard Disk

Help Back Finish Cancel

Installing Kali Linux

1. Attach Kali Linux ISO

- Go to **Settings > Storage**.
- Under **Controller: IDE**, select the Kali Linux ISO file.



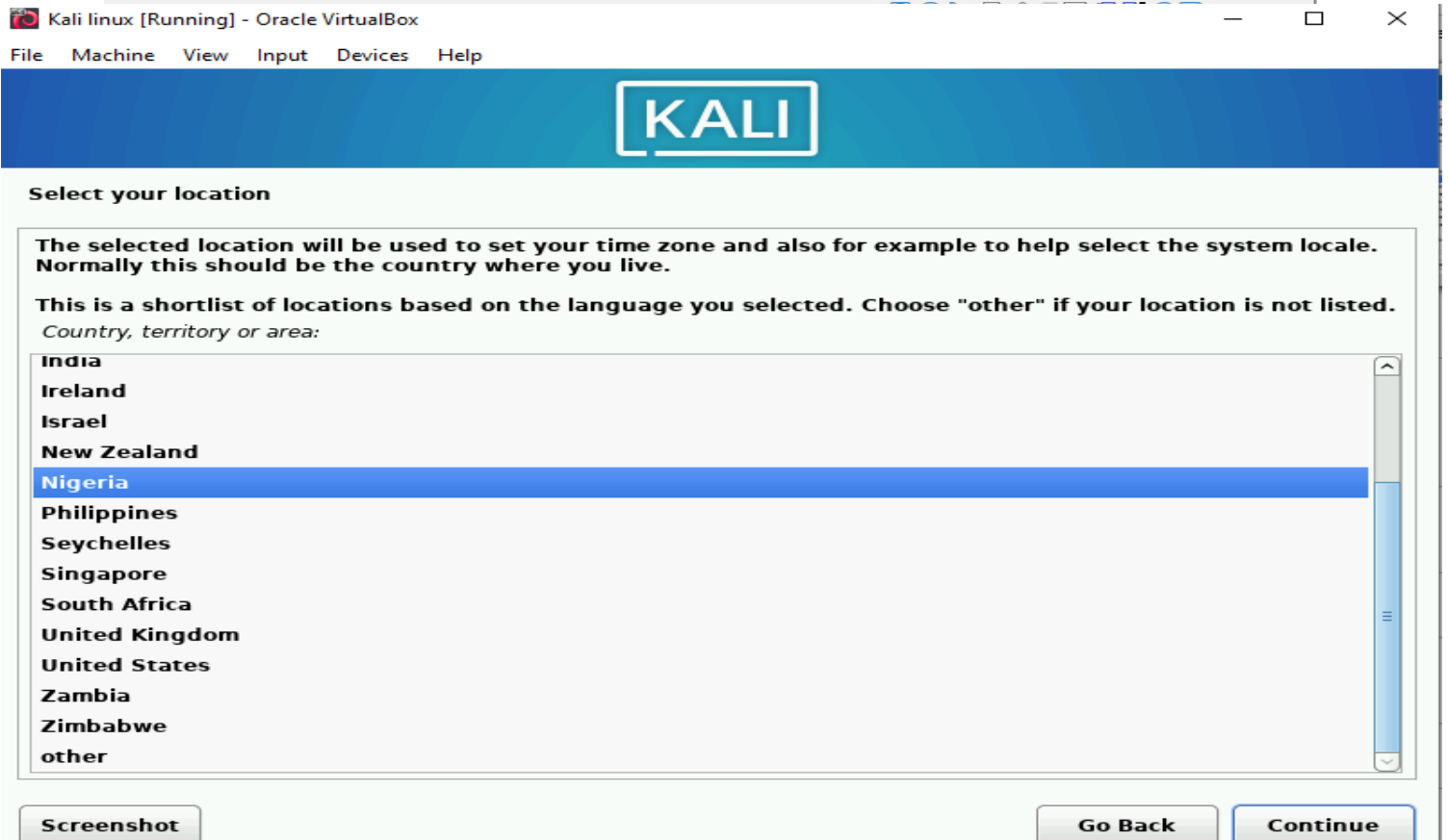
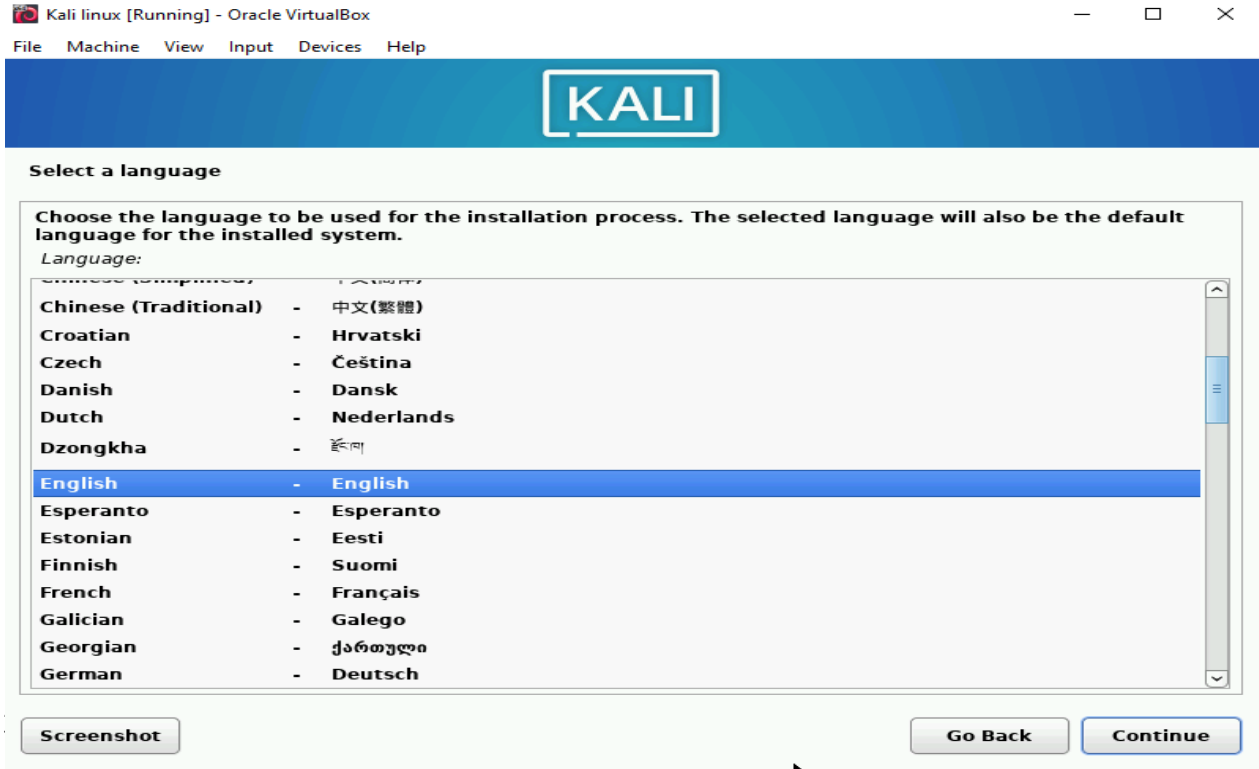
Kali Linux Installation Procedure

1. To start your installation, boot with your chosen installation medium. You should be greeted with the Kali Linux Boot screen. Choose either **Graphical install** or **Install** (Text-Mode). In this example, we chose the Graphical install.

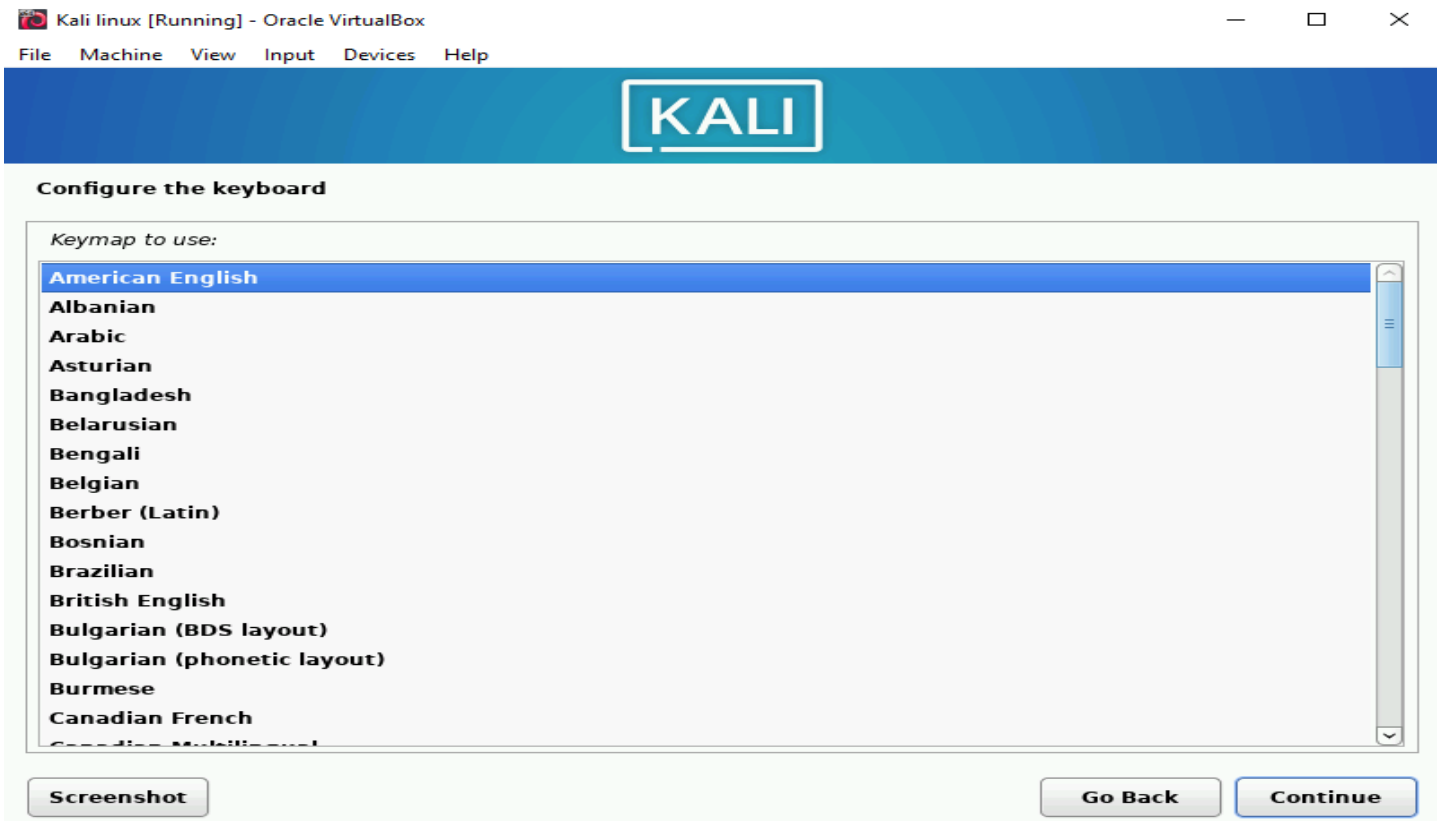


LANGUAGE

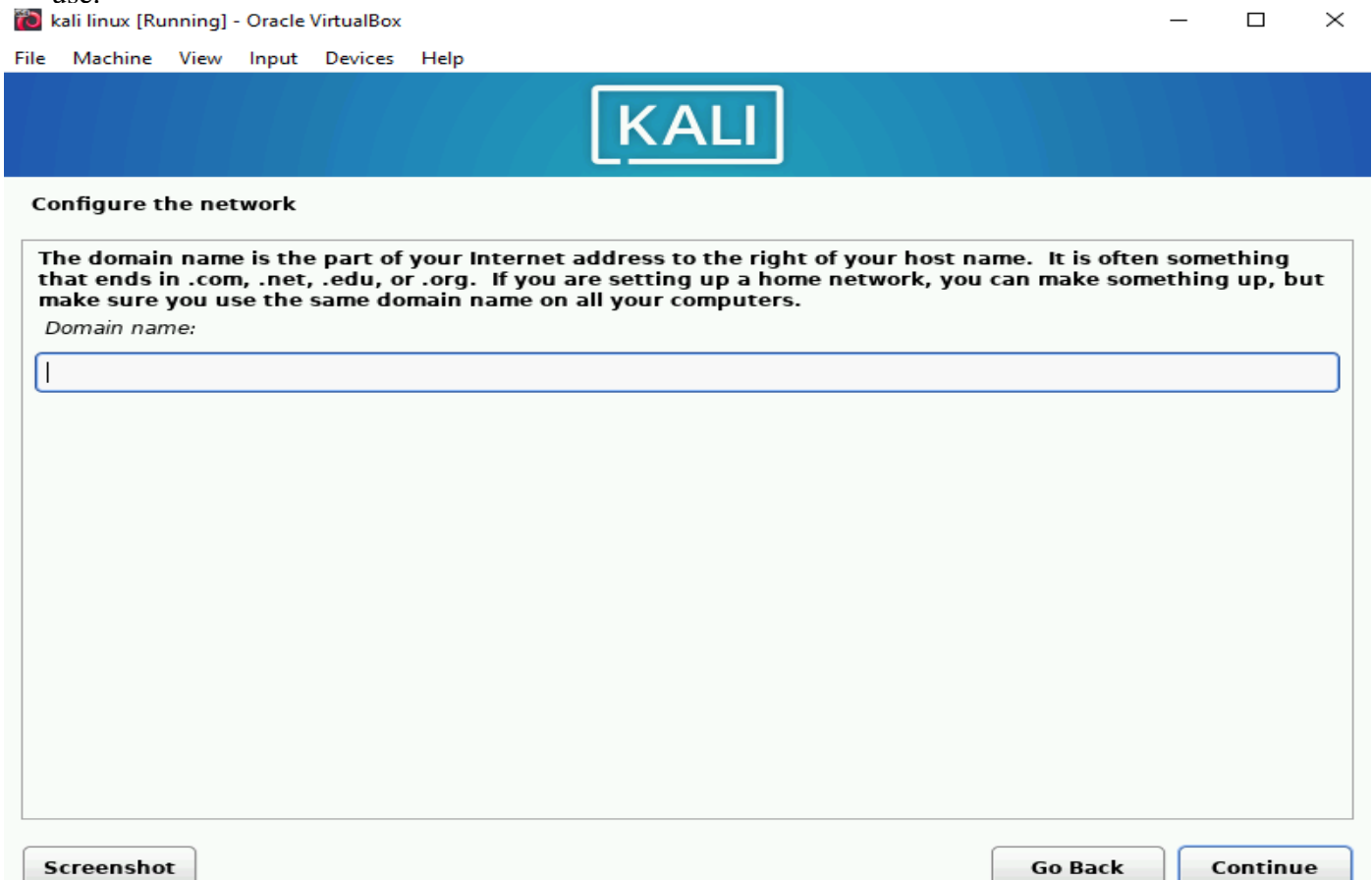
2. Select your preferred language. This will be used for both the setup process and once you are using Kali Linux.



4. Selecting your keyboard layout.



6. You may optionally provide a default domain name for this system to use. Preferred to be blank for local use.



User Accounts

- Next, creating the user account for the system (Full name, username and a strong password).

kali linux [Running] - Oracle VirtualBox

File Machine View Input Devices Help

KALI

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:

Screenshot Go Back Continue

kali linux [Running] - Oracle VirtualBox

File Machine View Input Devices Help

KALI

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:

Screenshot Go Back Continue

KALI

BY OFFENSIVE SECURITY

Set up users and passwords

A good password will contain a mixture of letters, numbers and punctuation and should be changed at regular intervals.

Choose a password for the new user:

☐ Show Password in Clear

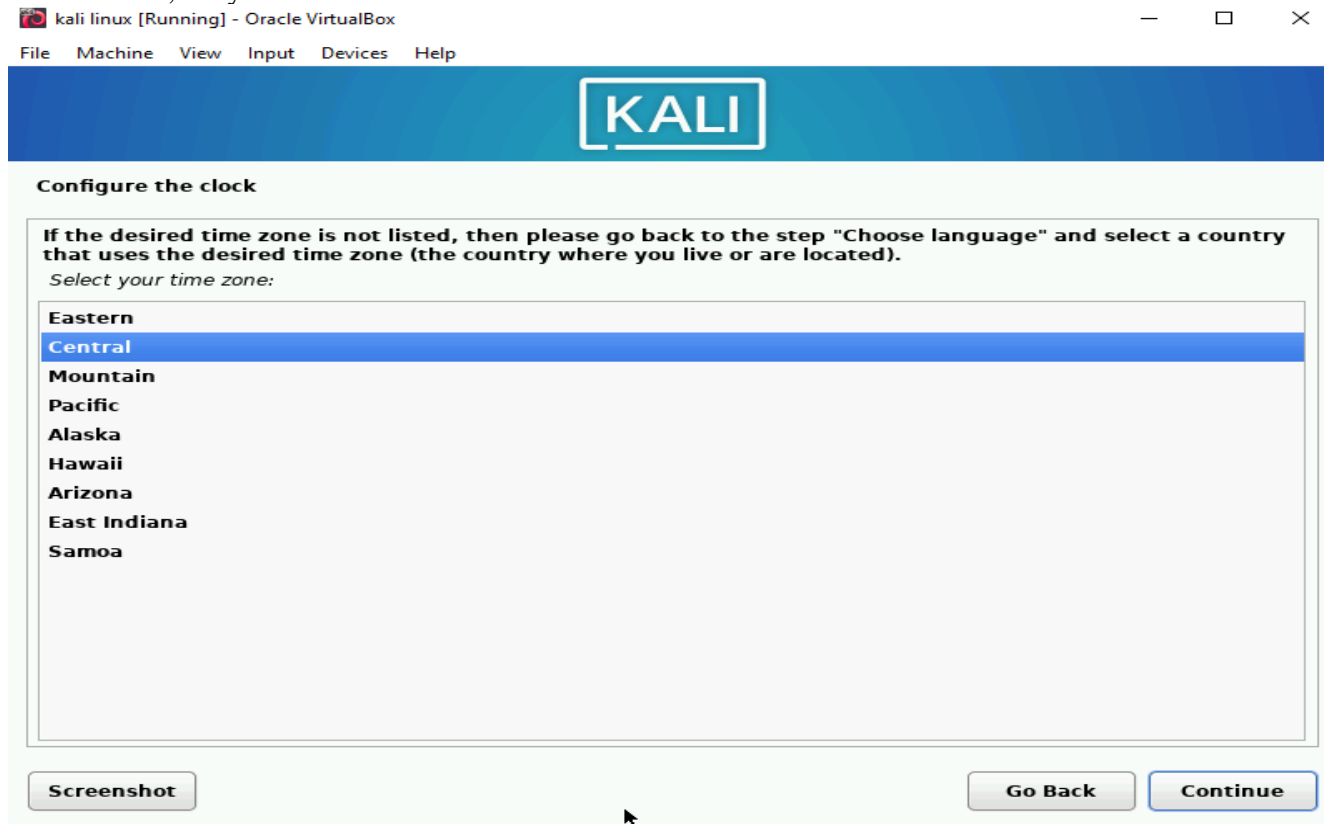
Please enter the same user password again to verify you have typed it correctly.

Re-enter password to verify:

☐ Show Password in Clear

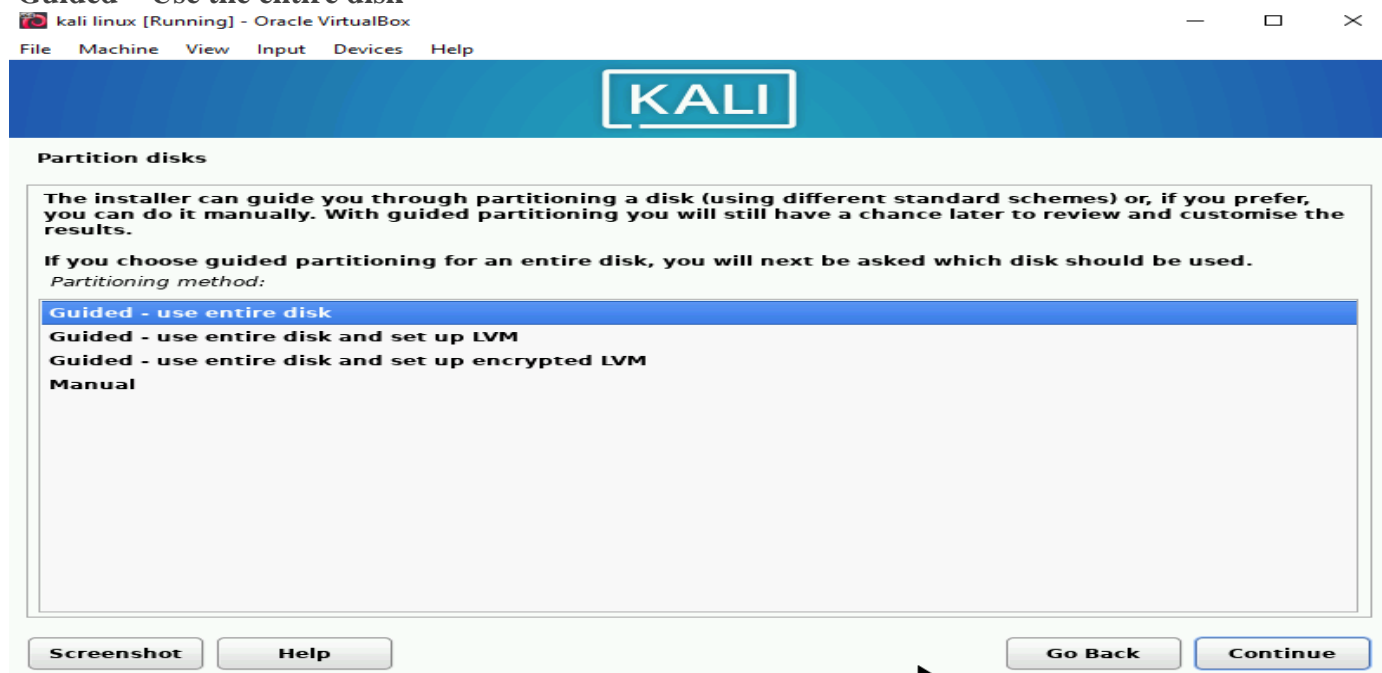
Clock

8. Next, set your time zone.



9. The installer will now scan your disks and present different setup options. Since we're using a **clean disk** for a **single-boot installation**, we'll select:

Guided – Use the entire disk



10. Select the disk to be partitioned.



Partition disks

Note that all data on the disk you select will be erased, but not before you have confirmed that you really want to make the changes.

Select disk to partition:

SCSI3 (0,0,0) (sda) - 55.0 GB ATA VBOX HARDDISK

Screenshot

Go Back

Continue

11. Keeping **all files in one partition** (the default option) is the easiest and recommended choice. This setup works perfectly for standard Kali Linux installations.



Partition disks

Selected for partitioning:

SCSI3 (0,0,0) (sda) - ATA VBOX HARDDISK: 55.0 GB

The disk can be partitioned using one of several different schemes. If you are unsure, choose the first one.

Partitioning scheme:

All files in one partition (recommended for new users)

Separate /home partition

Separate /home, /var, and /tmp partitions

Separate /var and /srv, swap < 1GB (for servers)

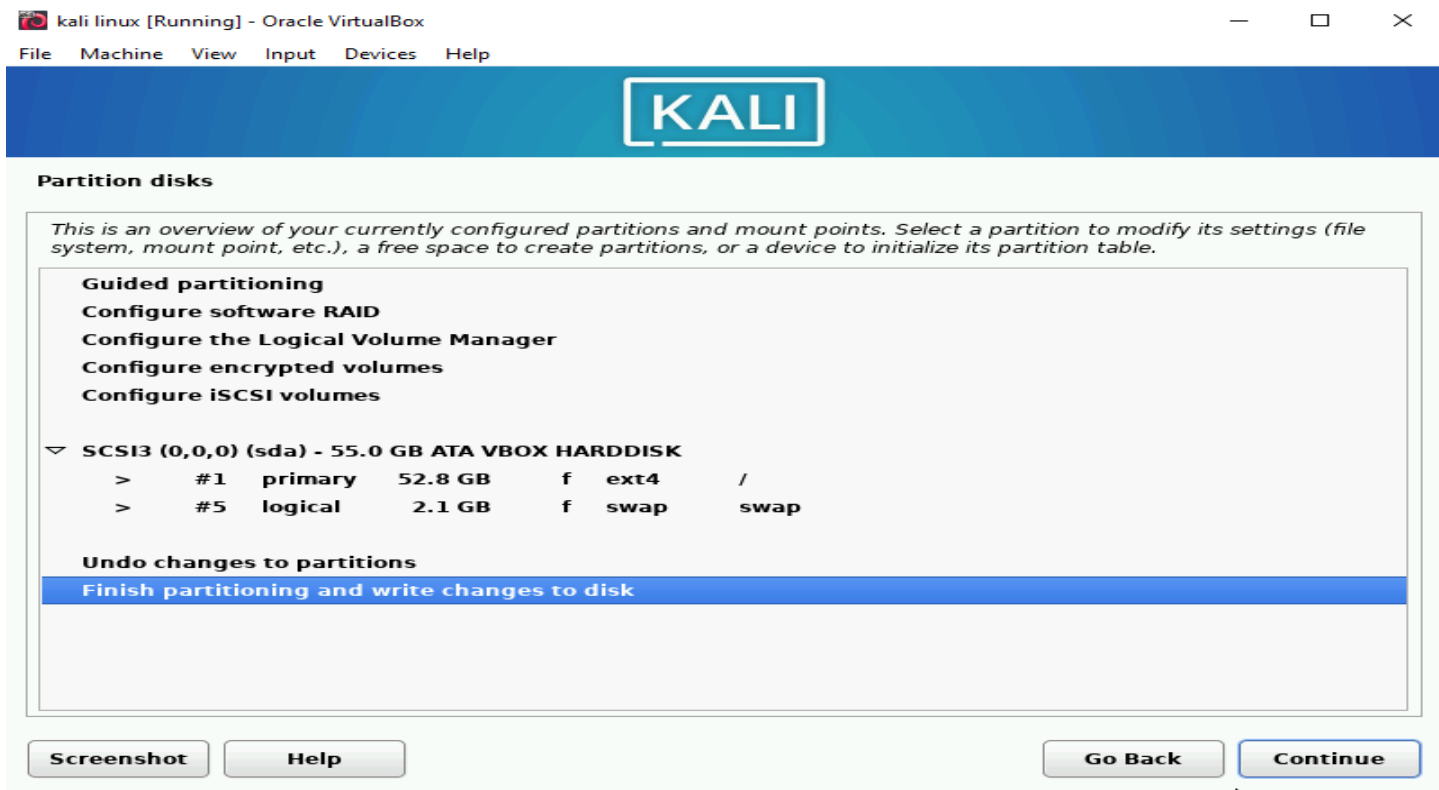
Small-disk (< 10GB) partitioning scheme

Screenshot

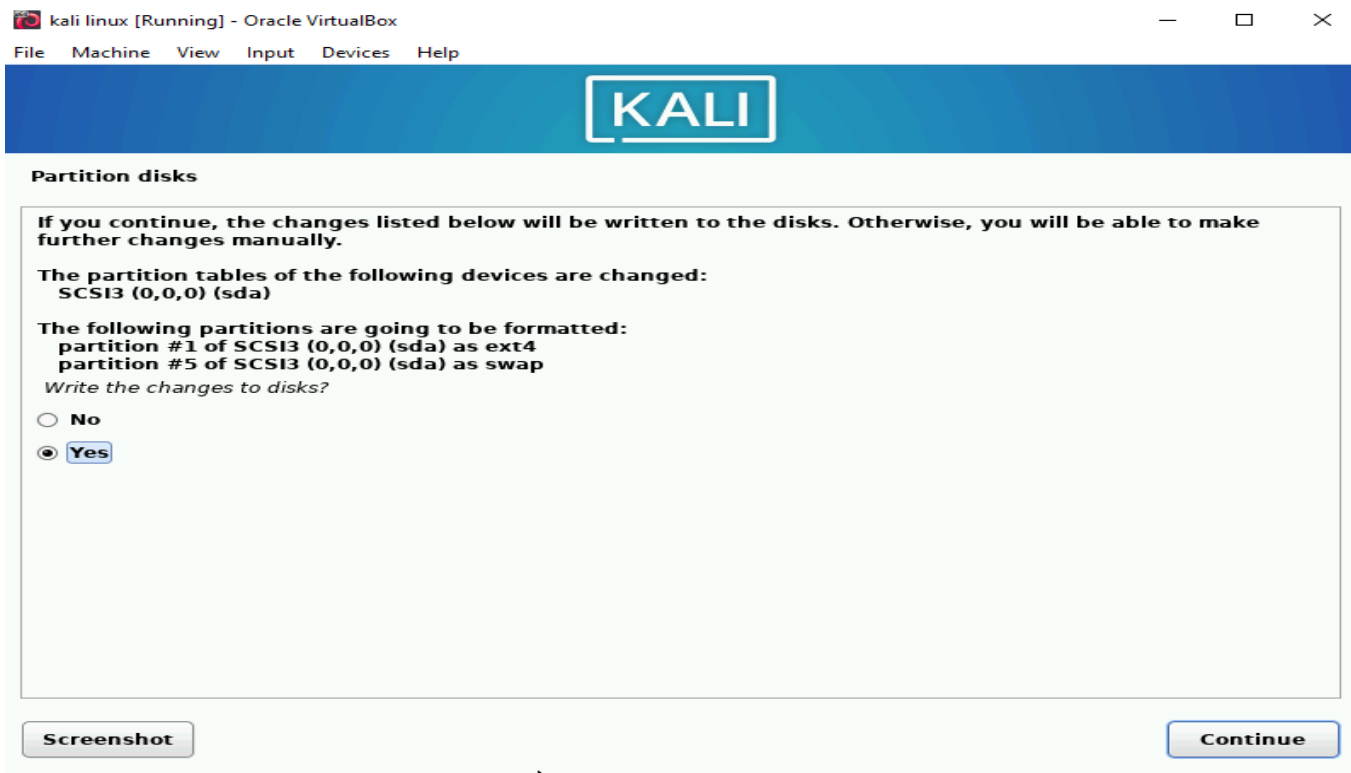
Help

Go Back

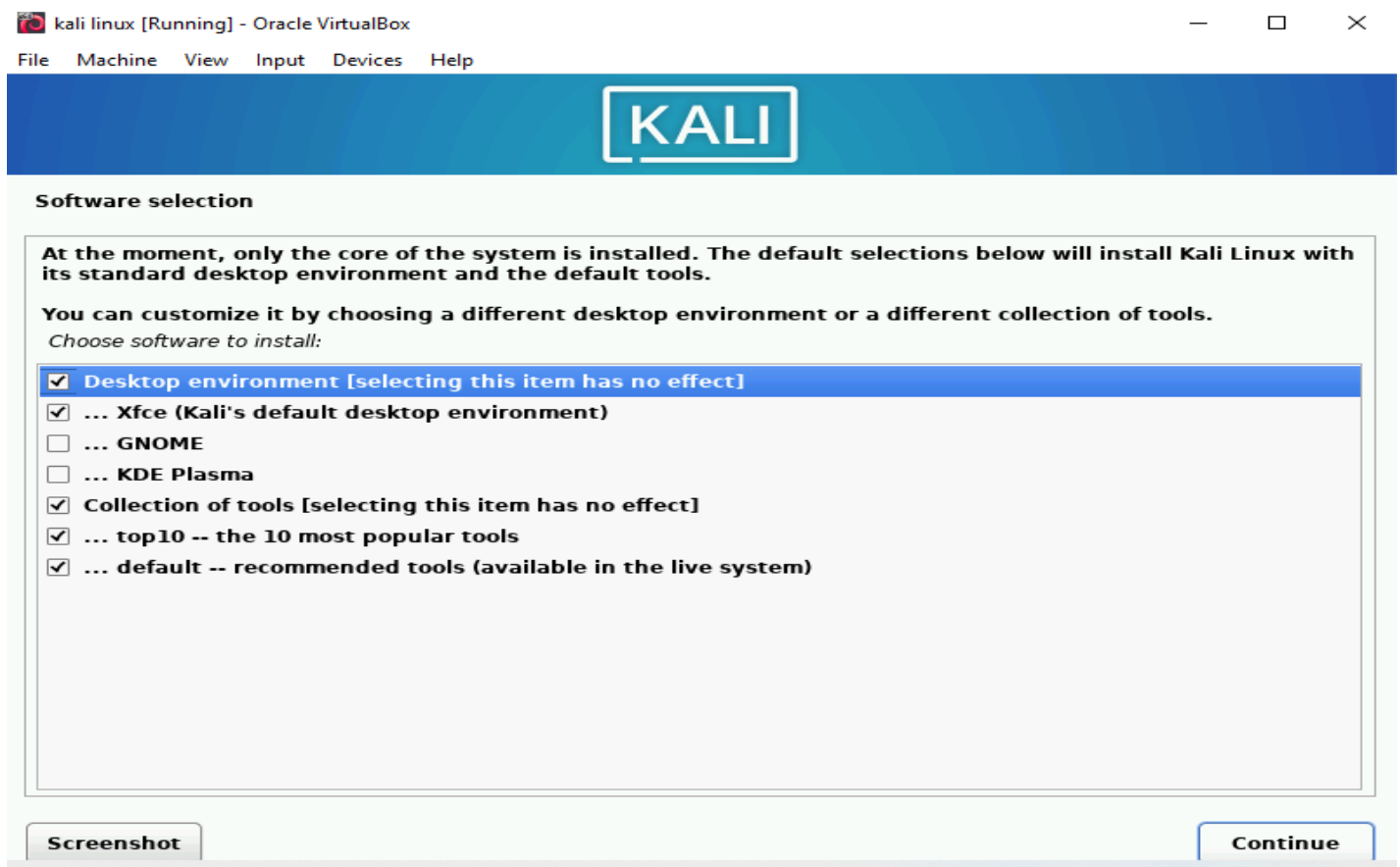
Continue



changes. After you click *Continue*, the installer will go to work and you'll have an almost finished installation.

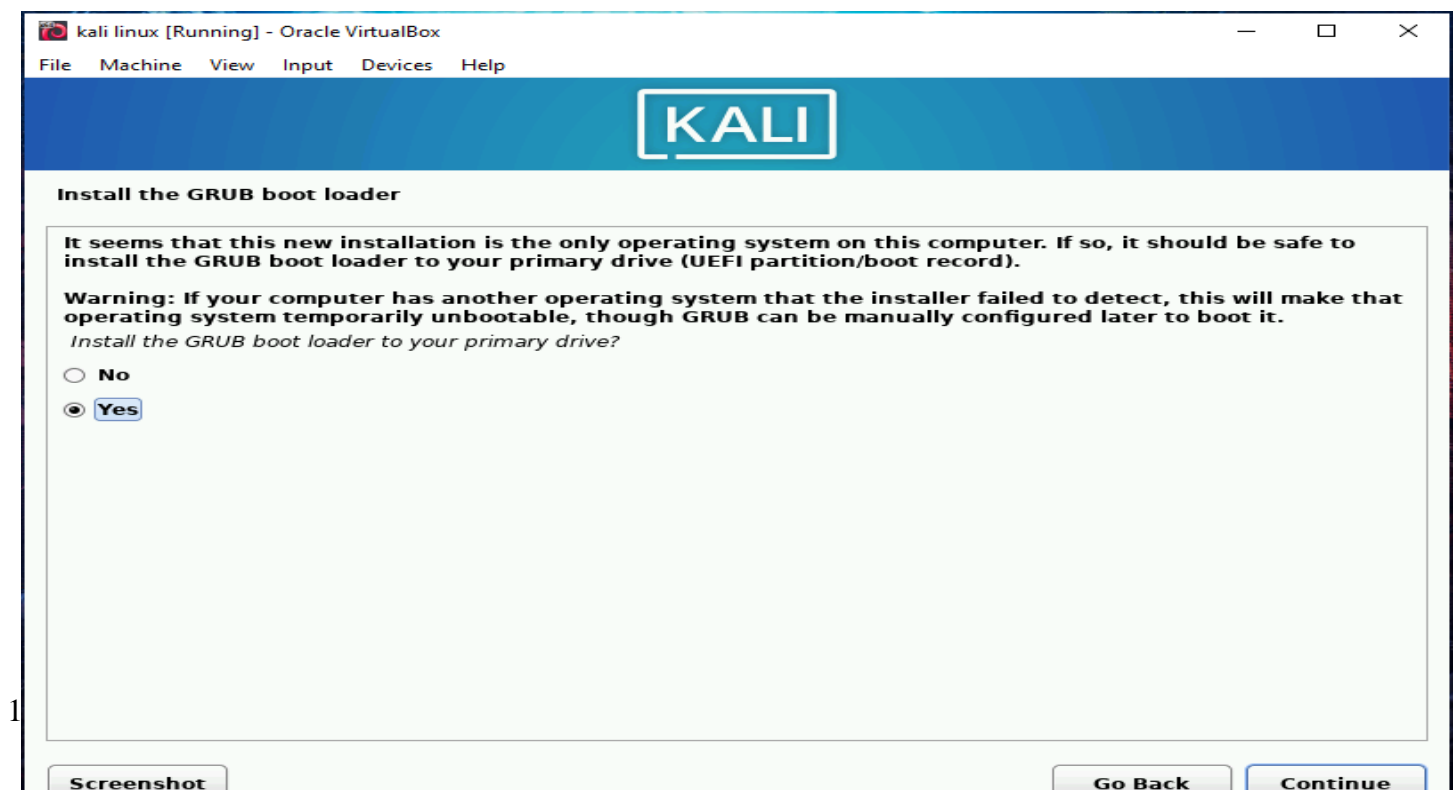


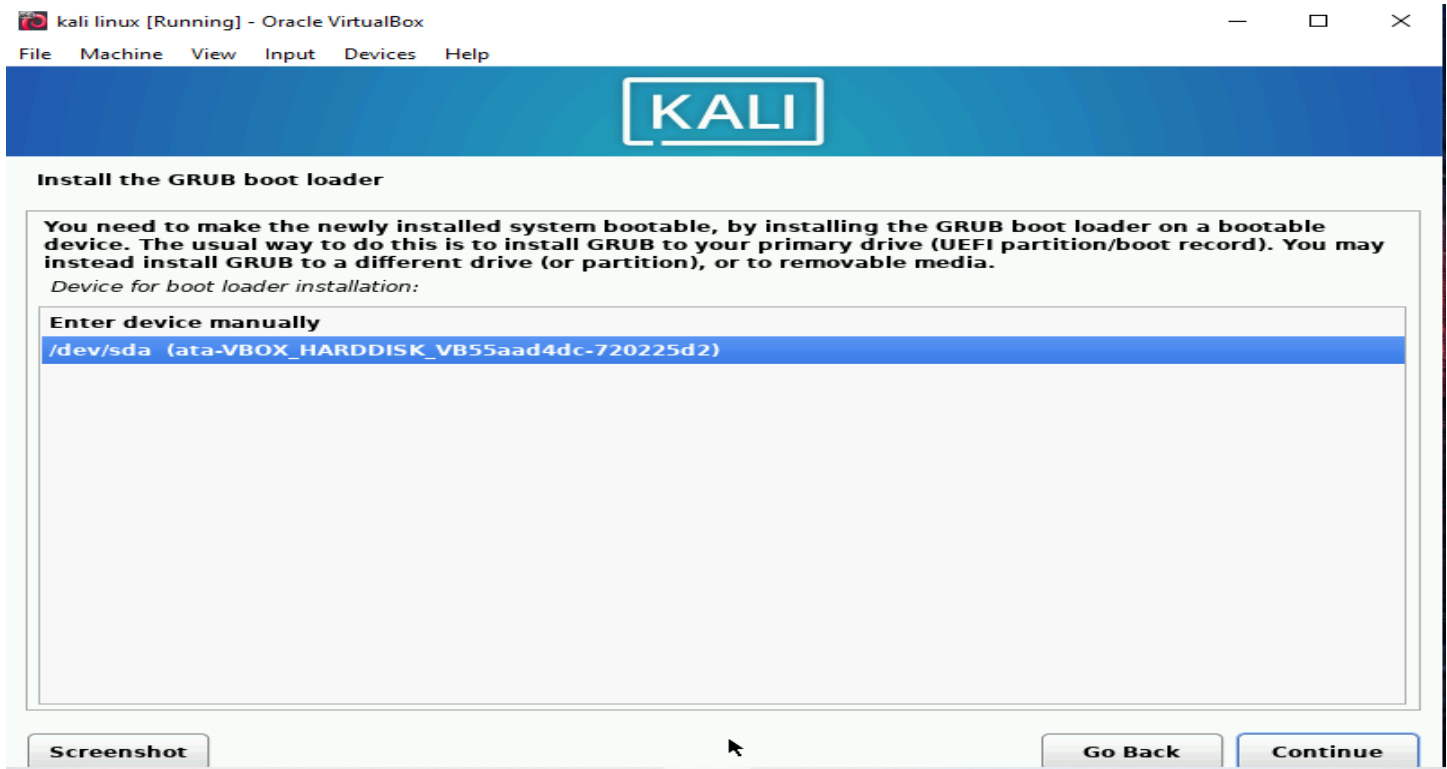
13. The default selections will install a standard Kali Linux system and you don't really have to change anything here.



BOOT INFORMATION

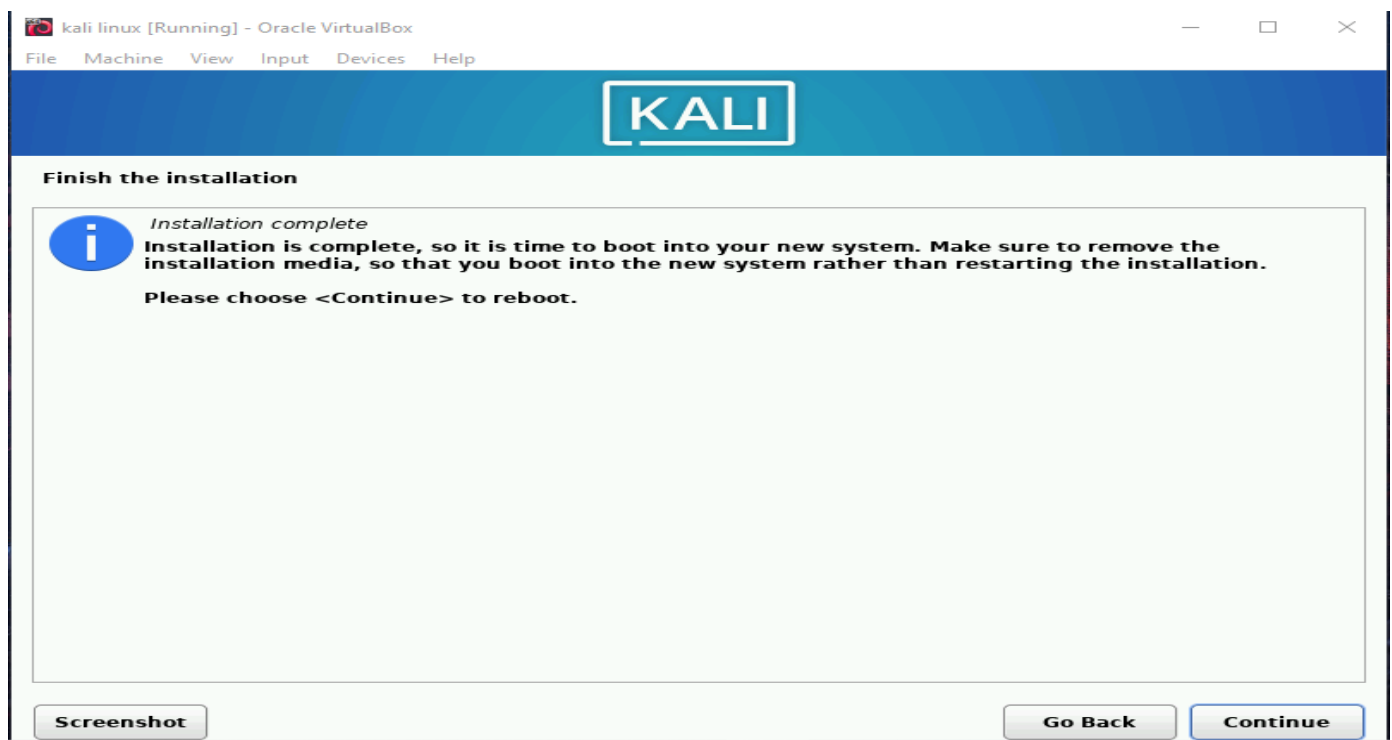
14. Next confirm to install the GRUB boot loader.





REBOOT

16. Finally, click Continue to reboot into your new Kali Linux installation



The installation Kali Linux is completed.