

# Module 3: Continuous Monitoring using Nagios XI

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## Demo Document 1

## Demo: Demo on Configuration of Nagios XI.

### Problem Statement:

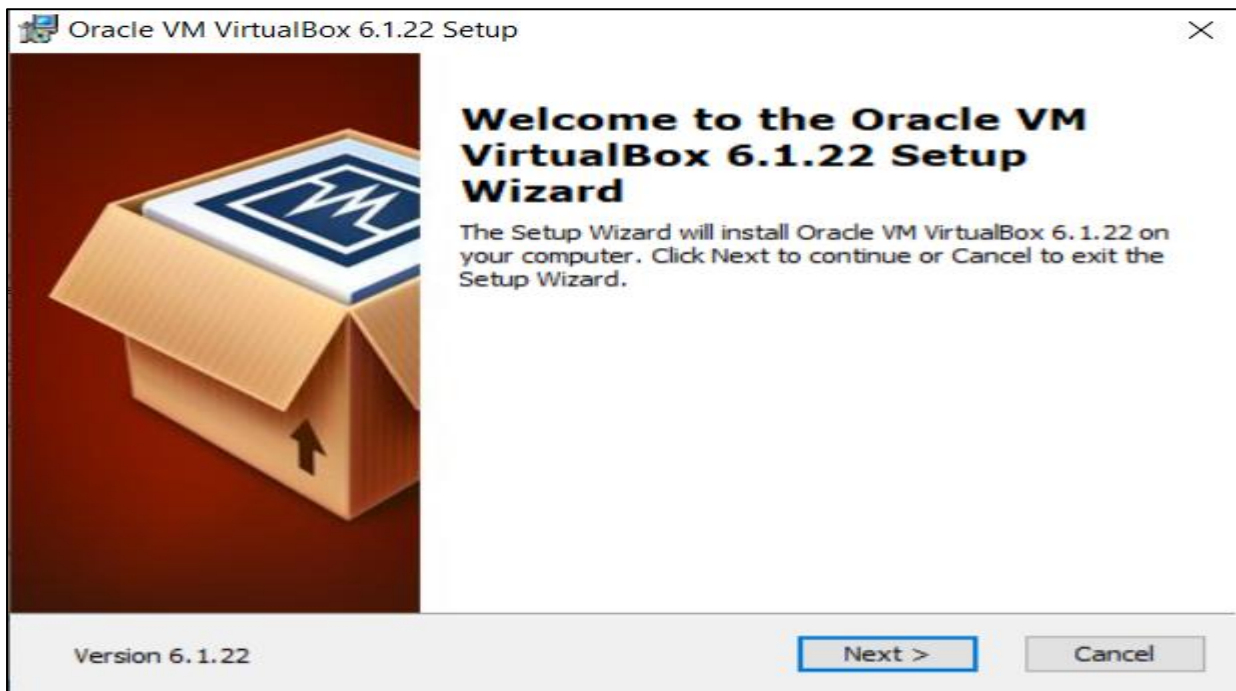
### How to configure nagios.cfg file.

### Solution Steps:

1. Let us **INSTALL** and **CONFIGURE NAGIOSXI** on **UBUNTU SERVER**. So, first you need to download the **VIRTUALBOX** in your local system using URL - <https://www.virtualbox.org/wiki/Downloads>  
Now click on **WINDOWS HOST** as shown in the below screenshot.



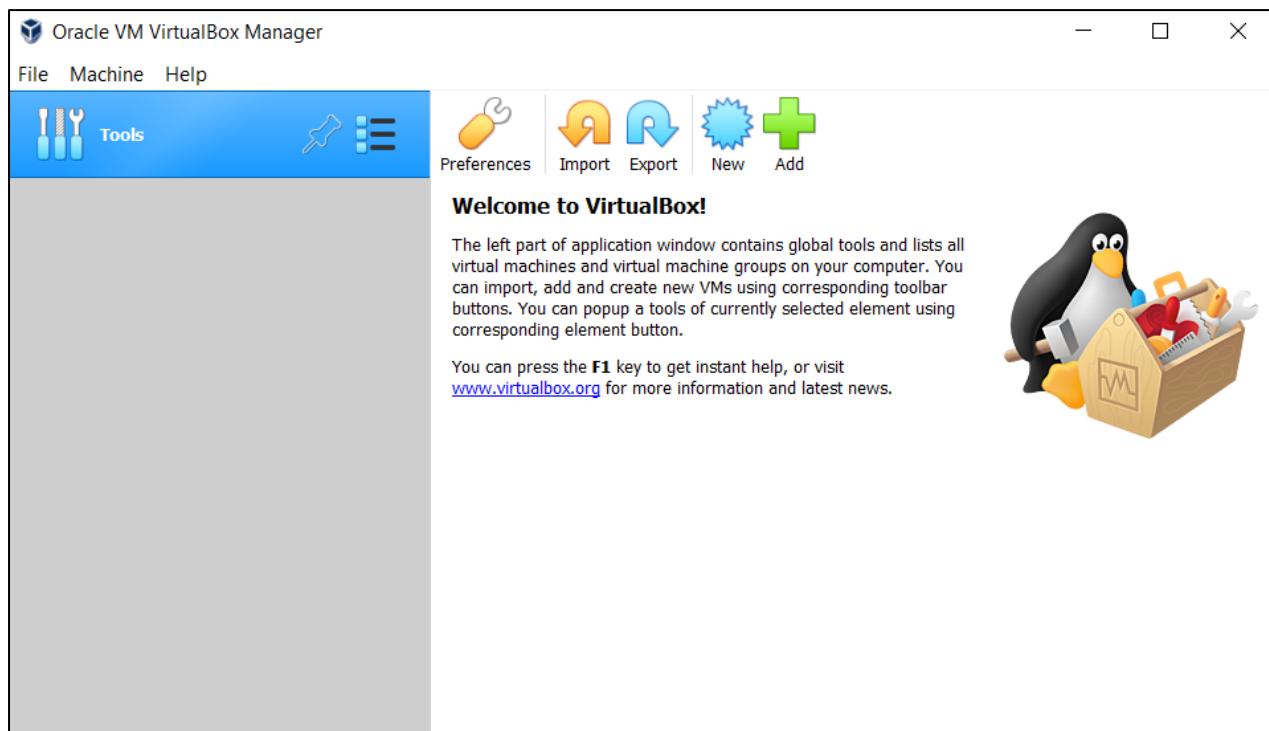
2. Once the **VIRTUALBOX** file is downloaded successfully then click on the file to **start** the installation setup as shown in the below screenshot.



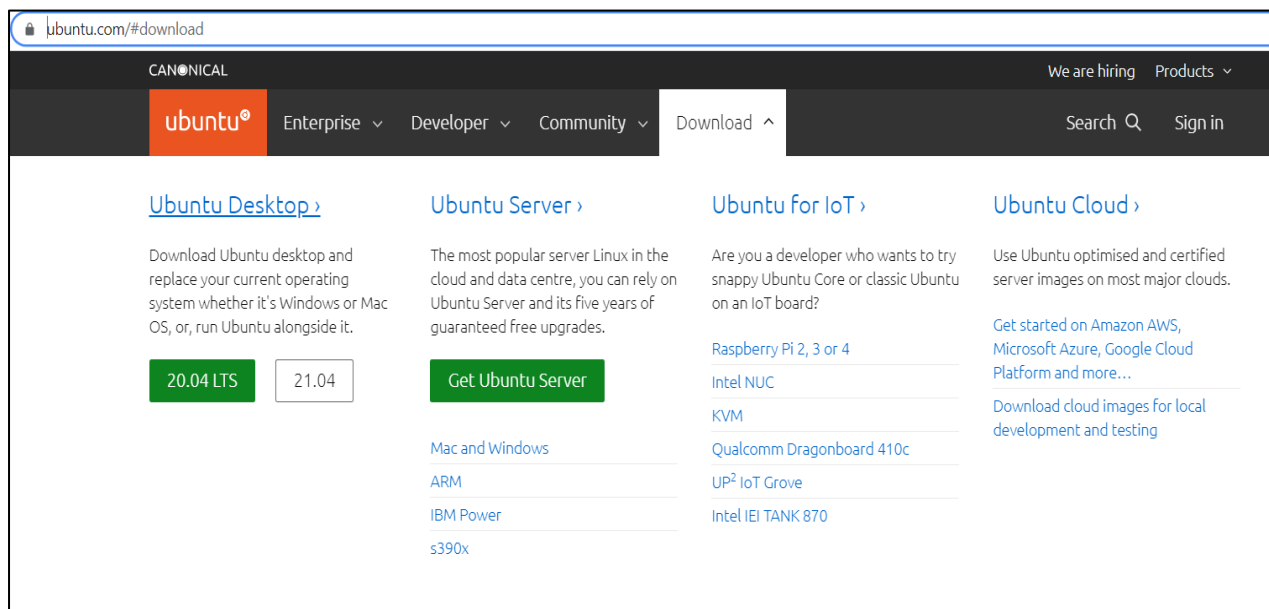
3. You need to keep settings as **DEFAULT** and click on **NEXT** options until you **FINISH** the **VIRTUALBOX** installation.



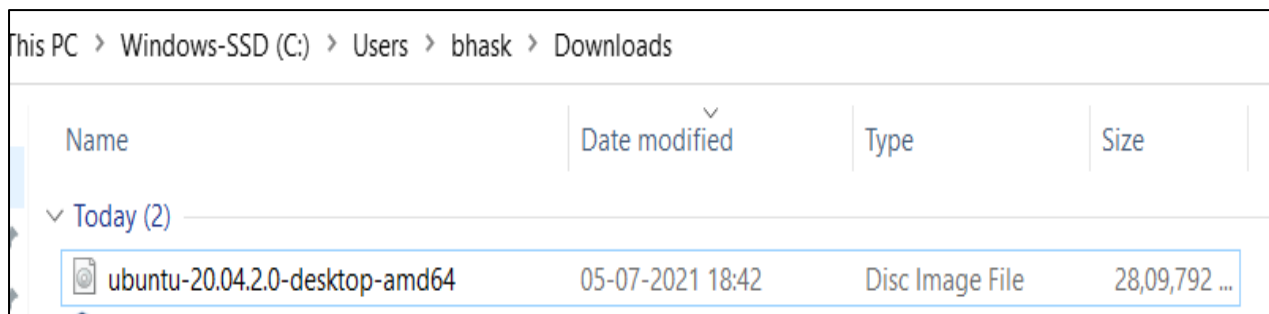
4. Now **VIRTUALBOX** is installed successfully as shown in the below screenshot.



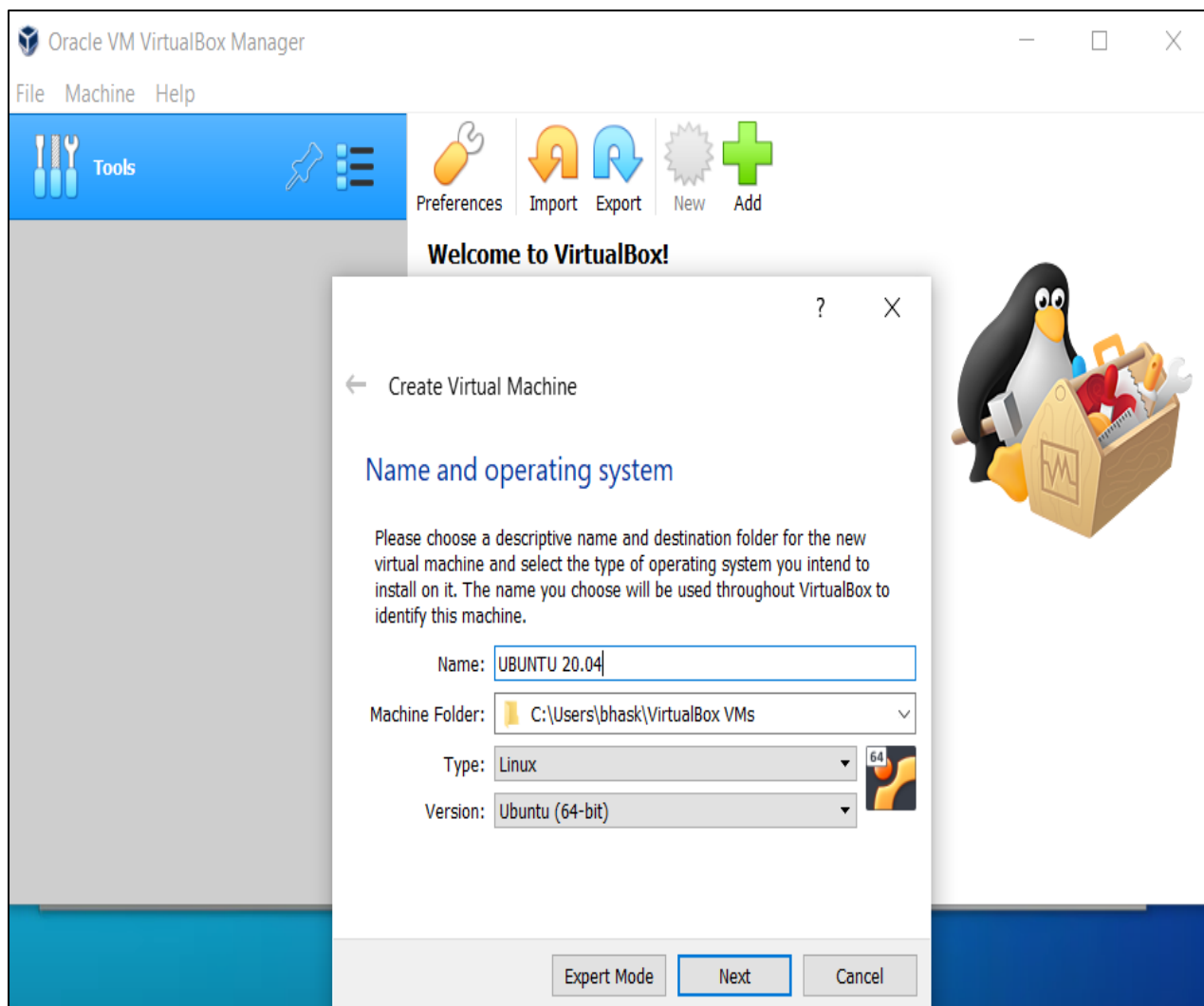
5. Now you need to download the **UBUNTU 20.04 LTS ISO** file using URL - <https://ubuntu.com/#download>  
Click on **20.04 LTS** to download the ISO file.



6. Now **UBUNTU 20.04 LTS ISO** file **downloaded** successfully.

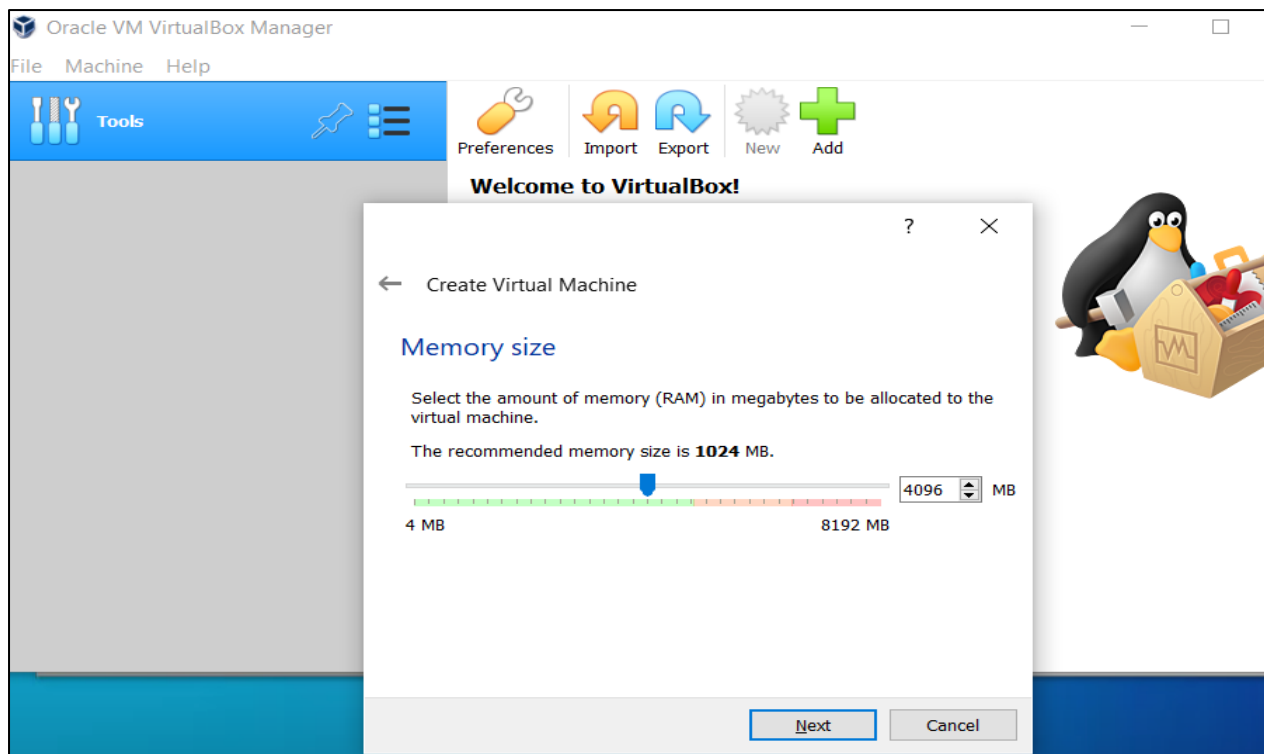


7. Navigate back to **VIRTUALBOX** and click on **NEW** icon. Now provide the details as mentioned in the below screenshot and click on **NEXT** button.

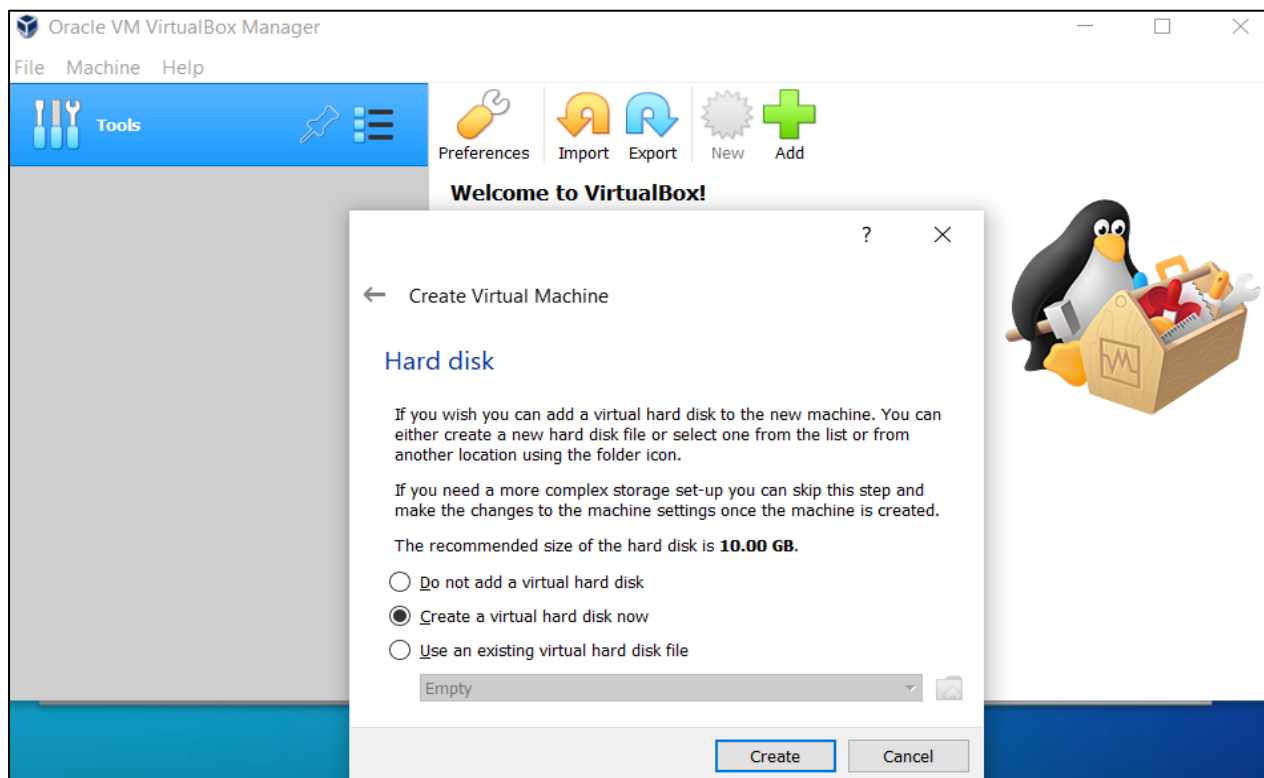


8. Now set **Memory size (RAM)** as **4096 MB** or **4 GB**.

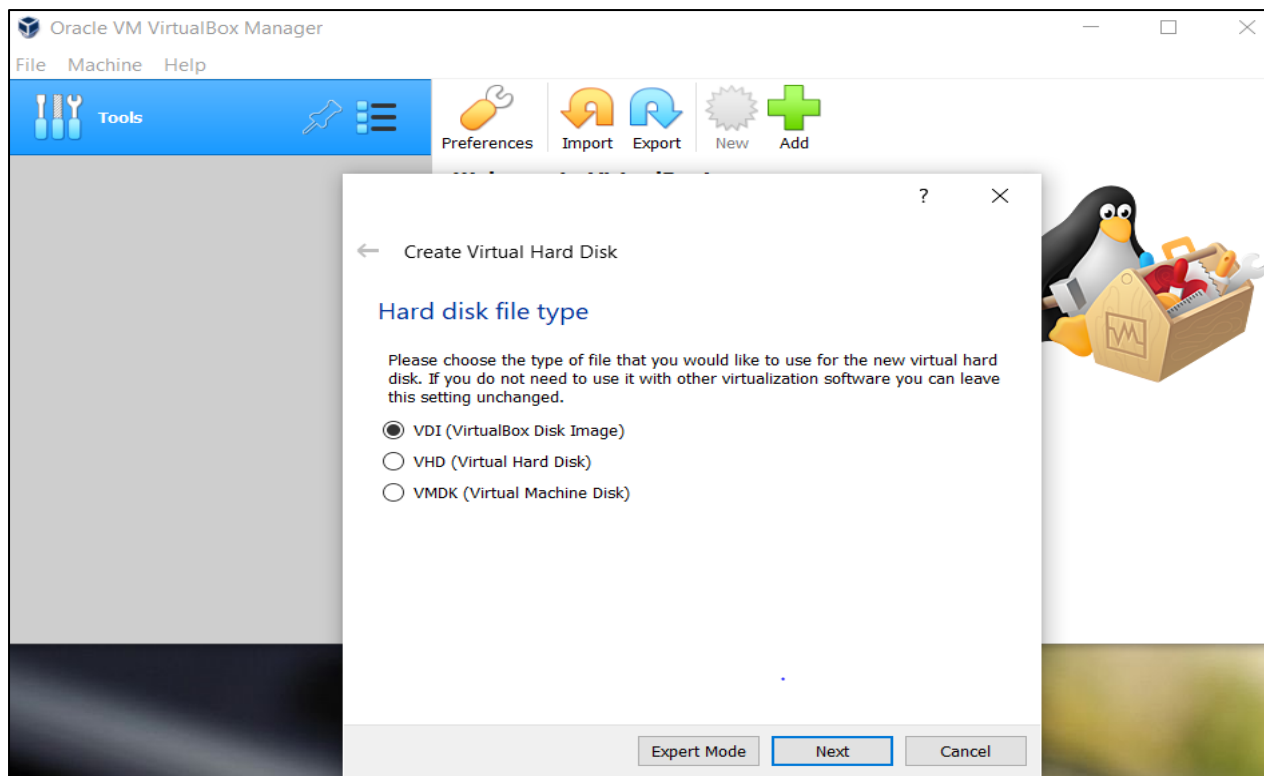
**NOTE** – You can set the Memory size (RAM) between 2 GB to 4 GB.



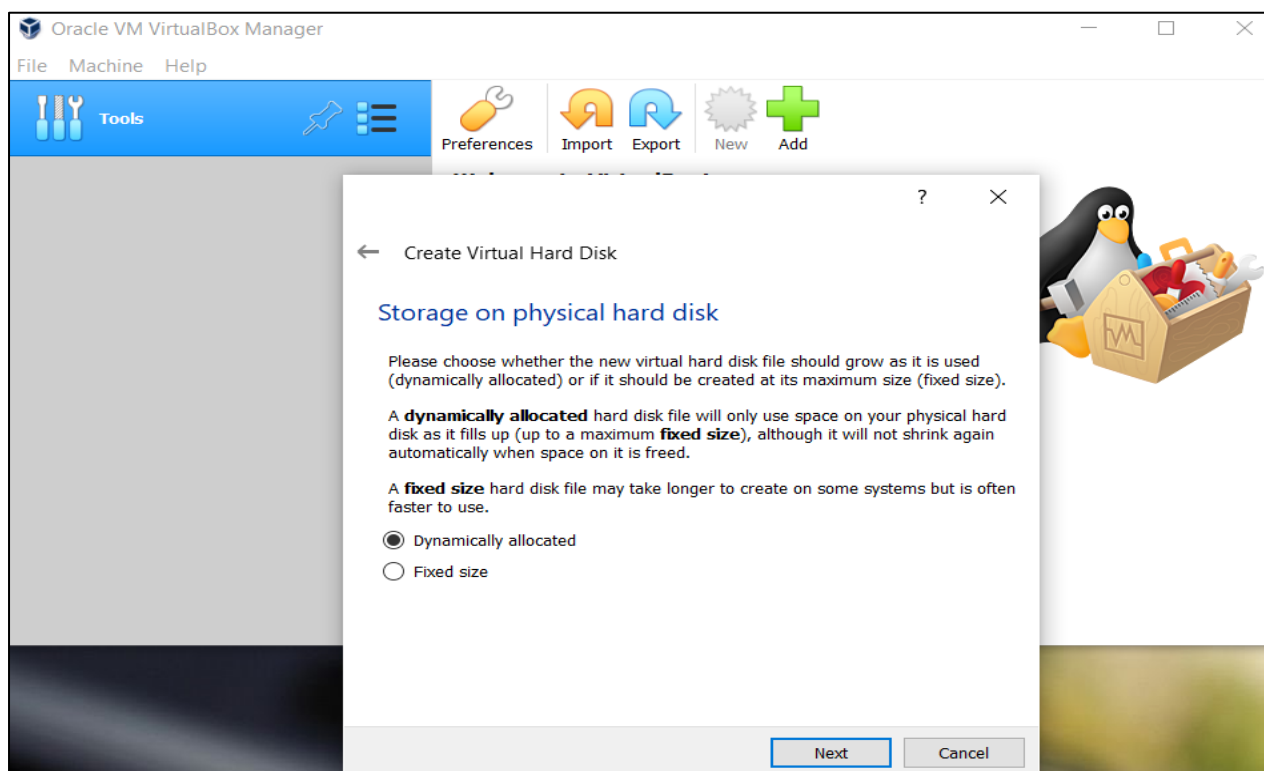
9. Select **Create a virtual hard disk now** and click on **CREATE** button.



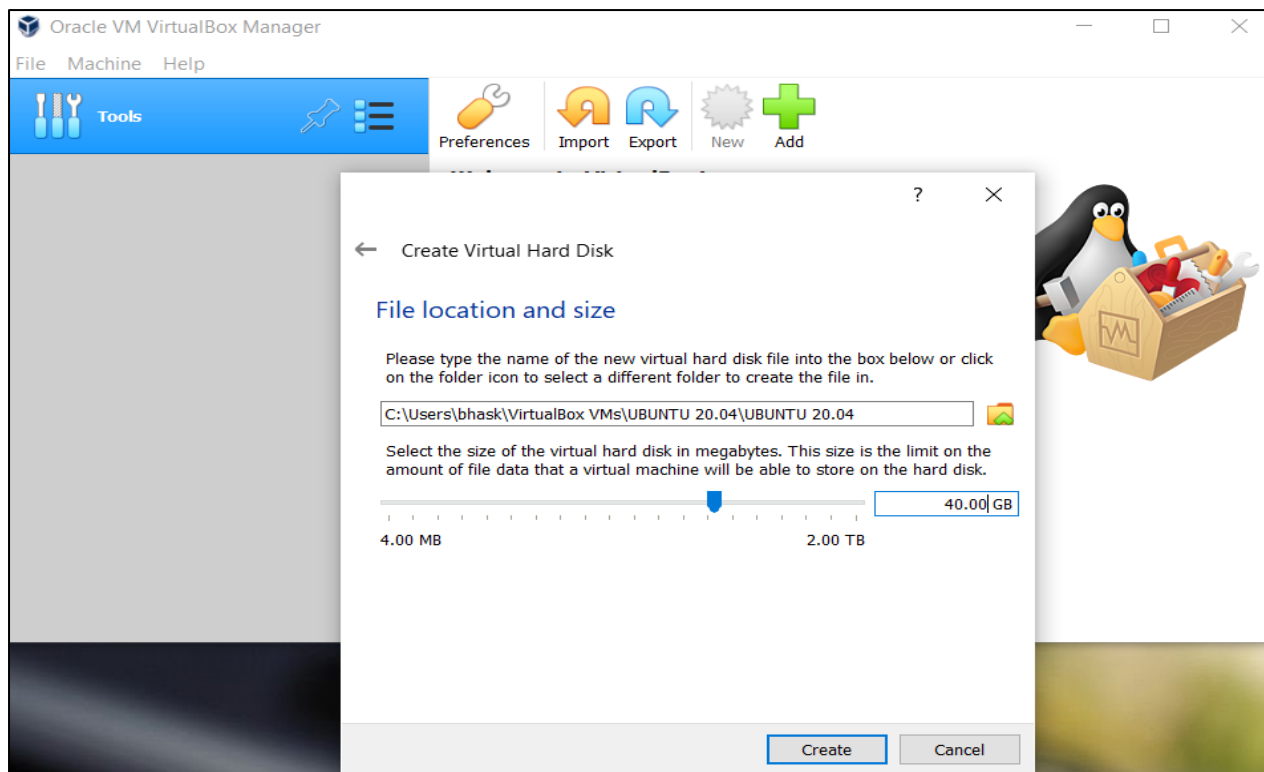
10. Now select **VDI** option and click on **NEXT**.



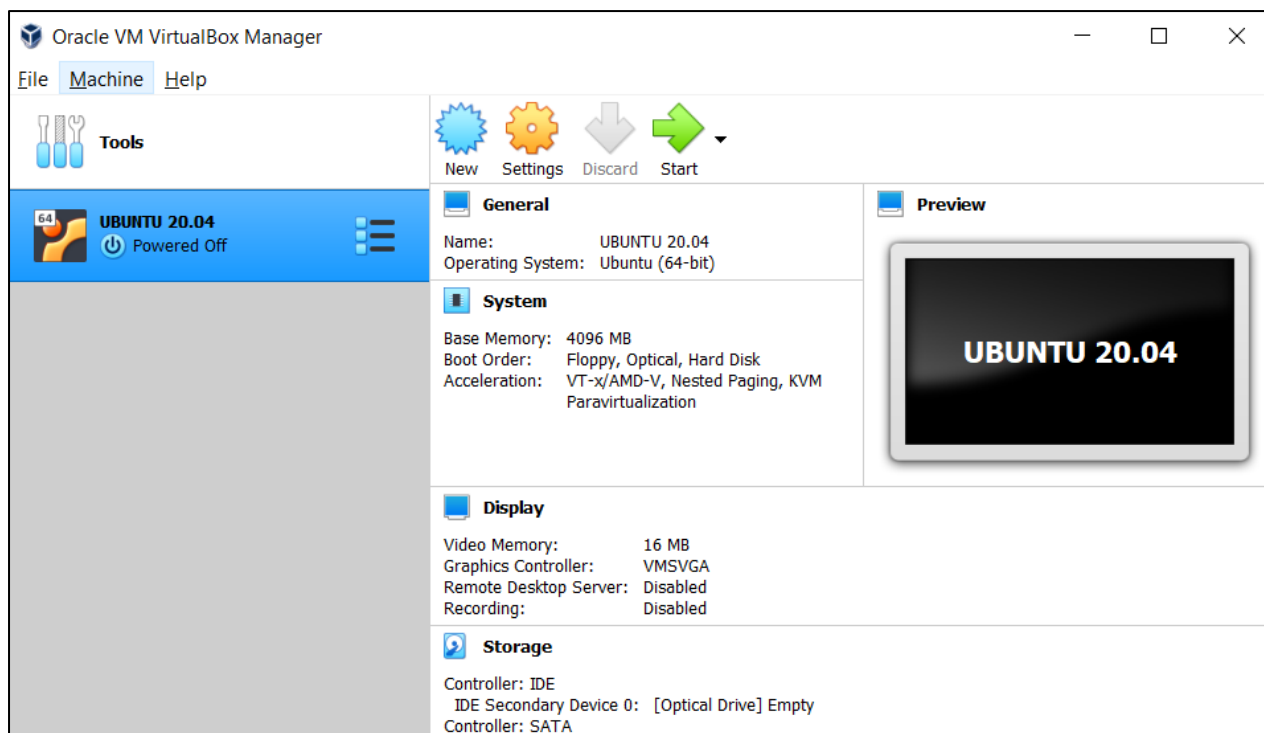
11. Select **Dynamically Allocated** option and click on **NEXT** button.



12. Select the **virtual hard disk size to 40 GB** and click on **CREATE**.

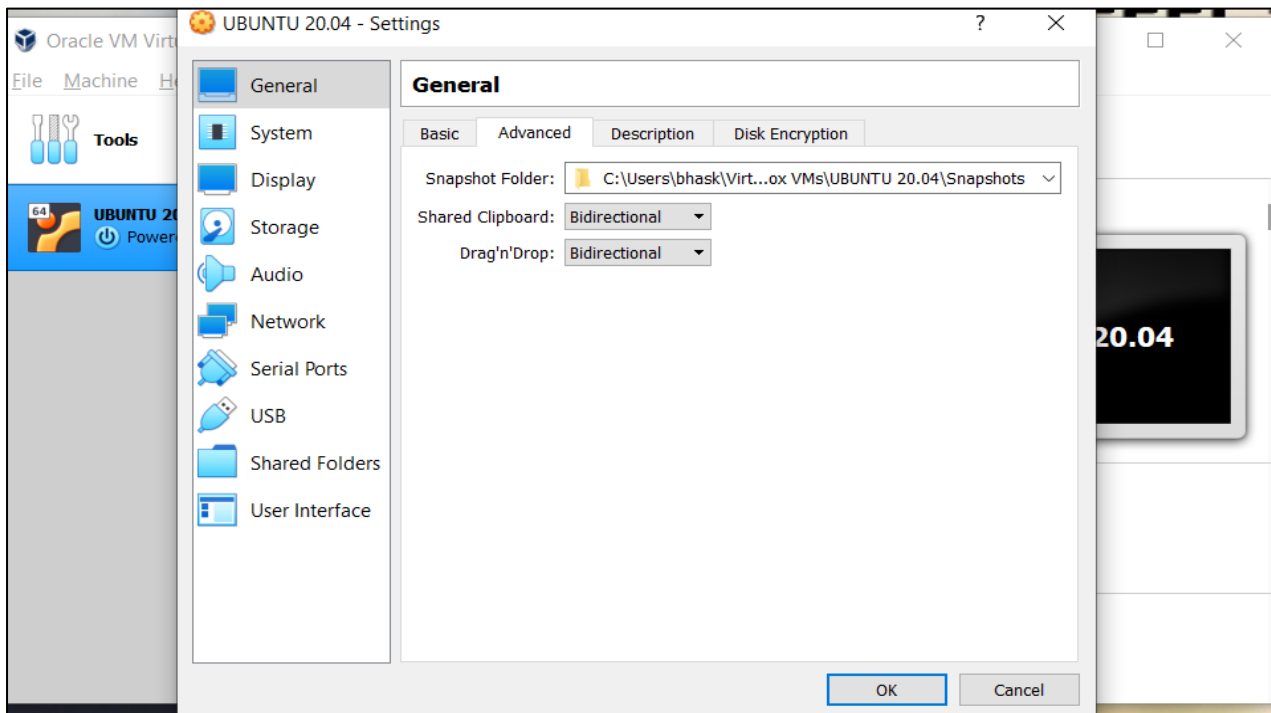


13. Now select **UBUNTU** machine from left panel and click on **SETTINGS** icon.



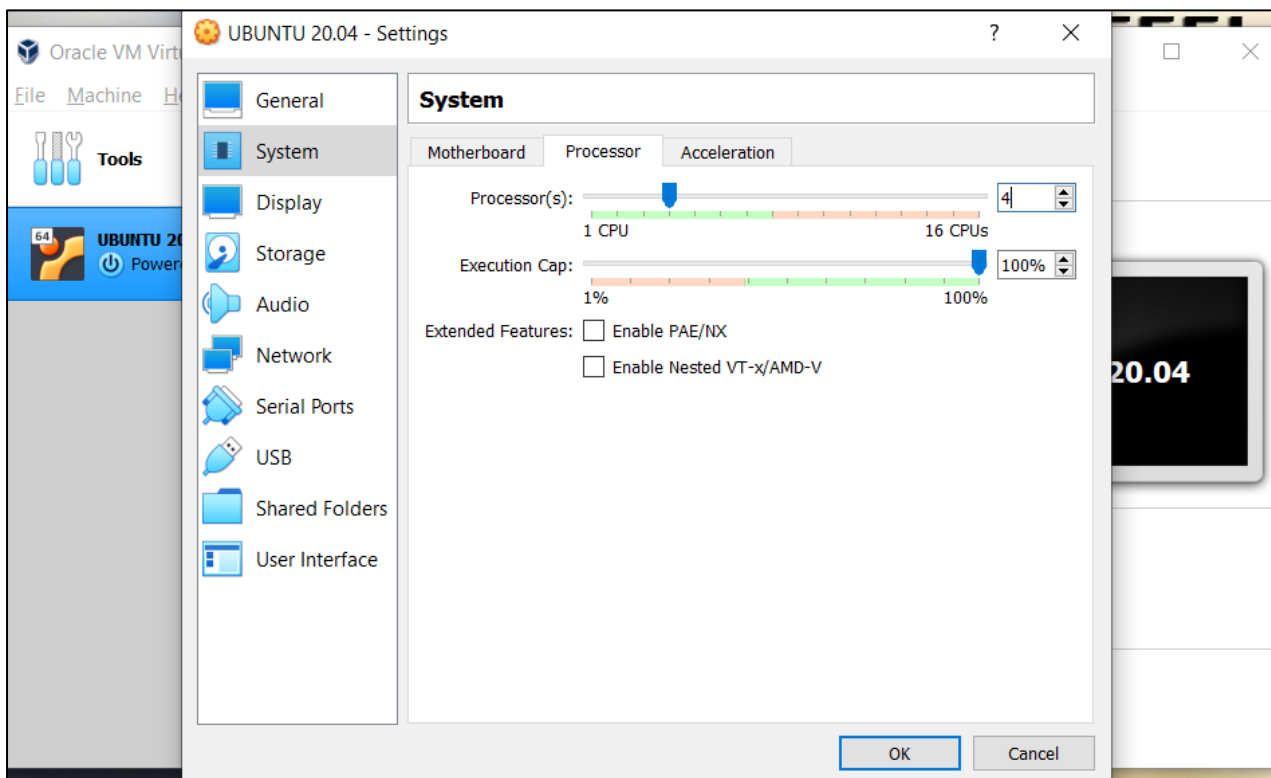


14. Now navigate to **ADVANCED** section under **GENERAL TAB** and set **Shared Clipboard** and **Drag'n'Drop** settings to **BIDIRECTIONAL**.

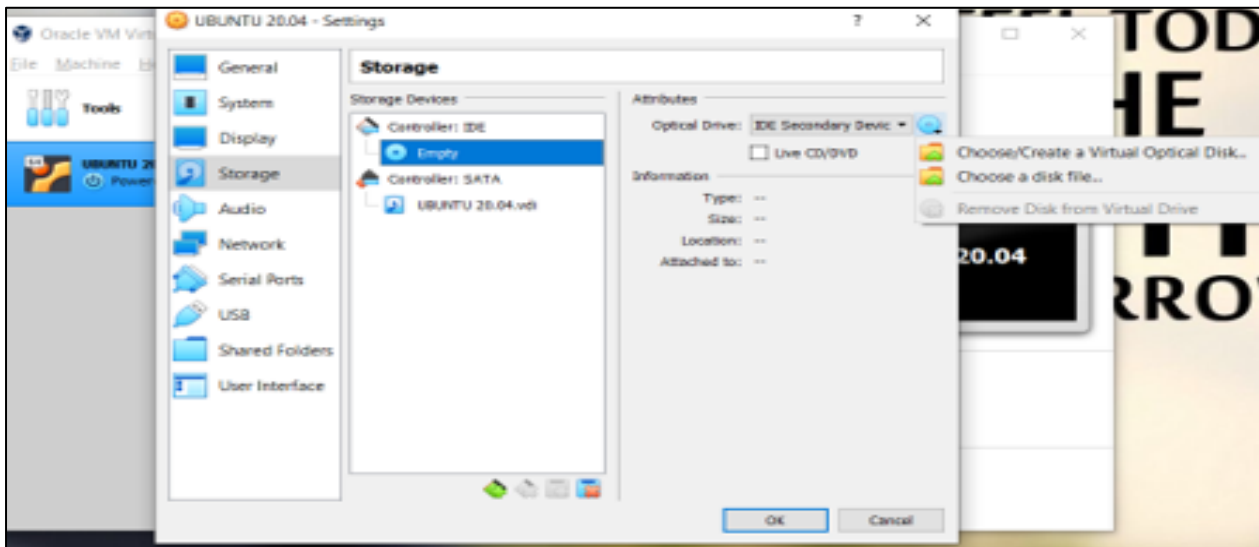


15. Now under **System TAB** select **PROCESSOR** and set to **4 CPU**.

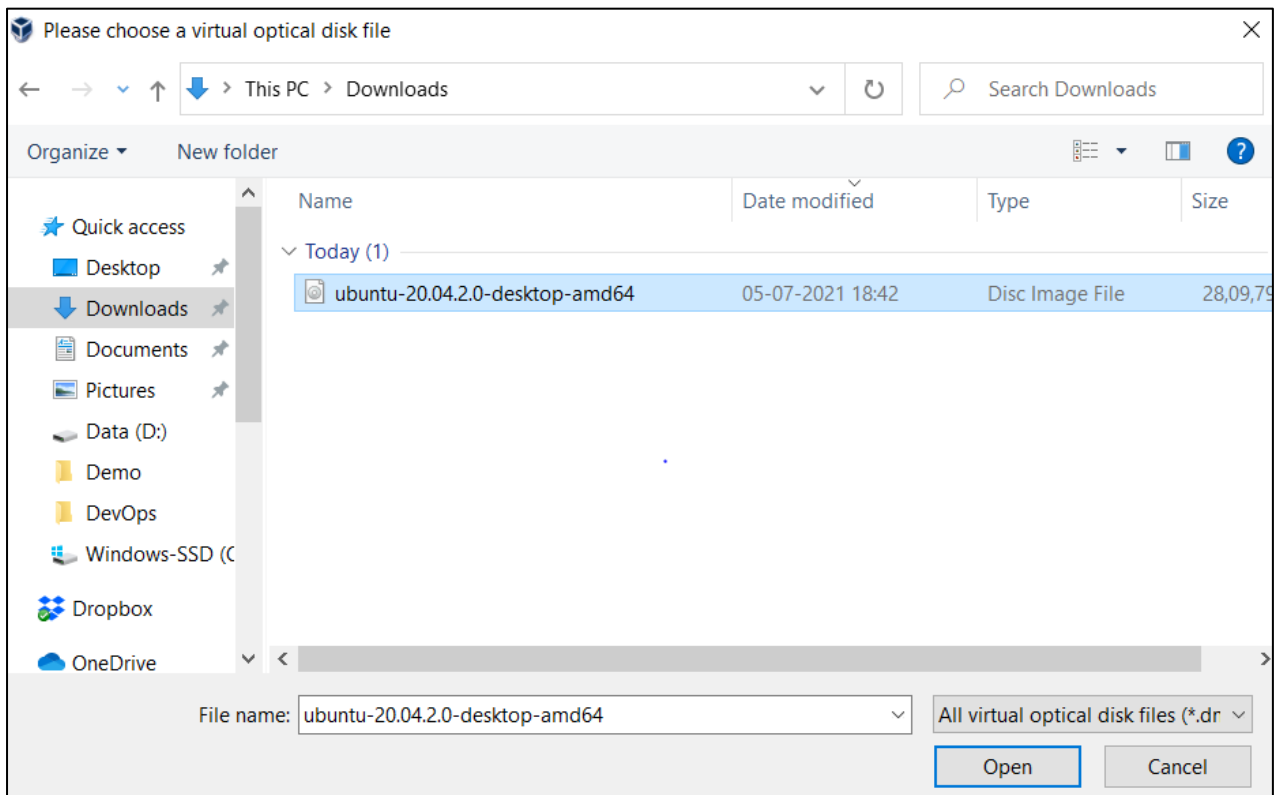
**NOTE** – you can set **PROCESSOR** between 2 CPU and 4 CPU.



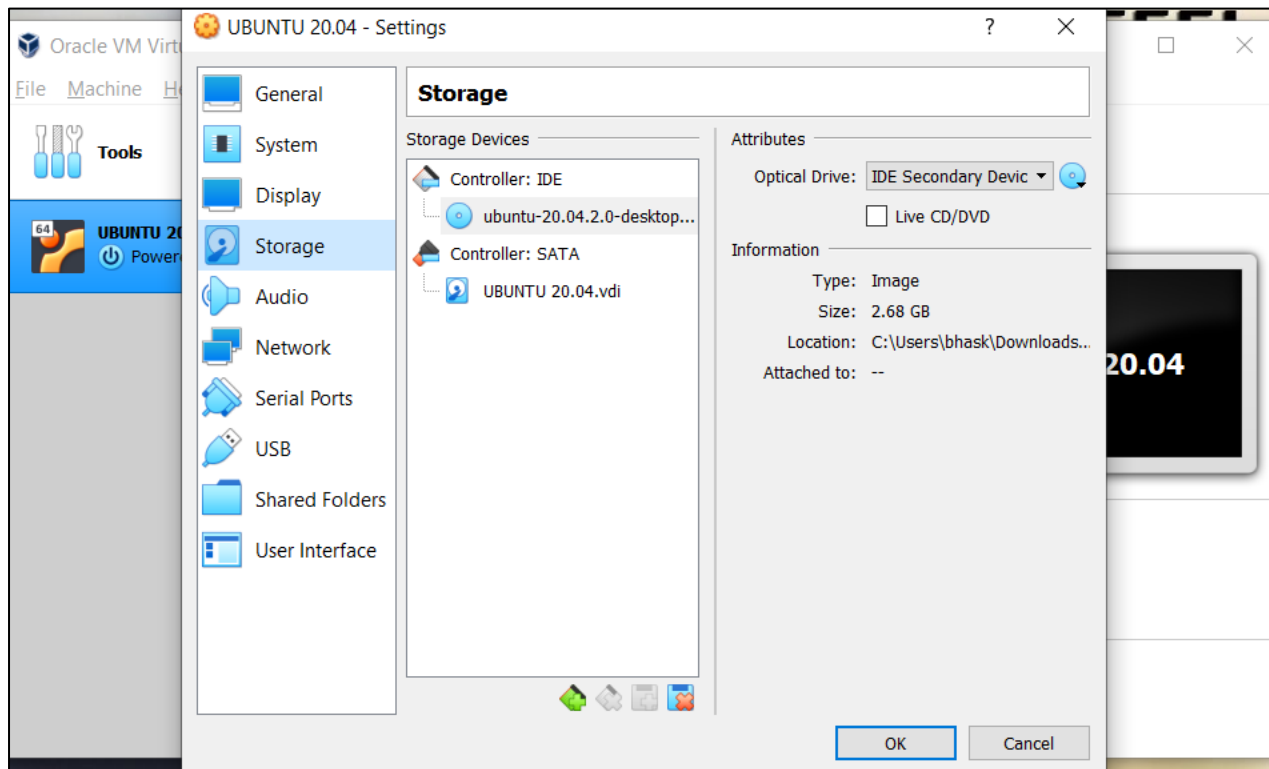
16. Now under **STORAGE** section click on **EMPTY** and further click on **CD ICON** and select **Choose a disk file**.



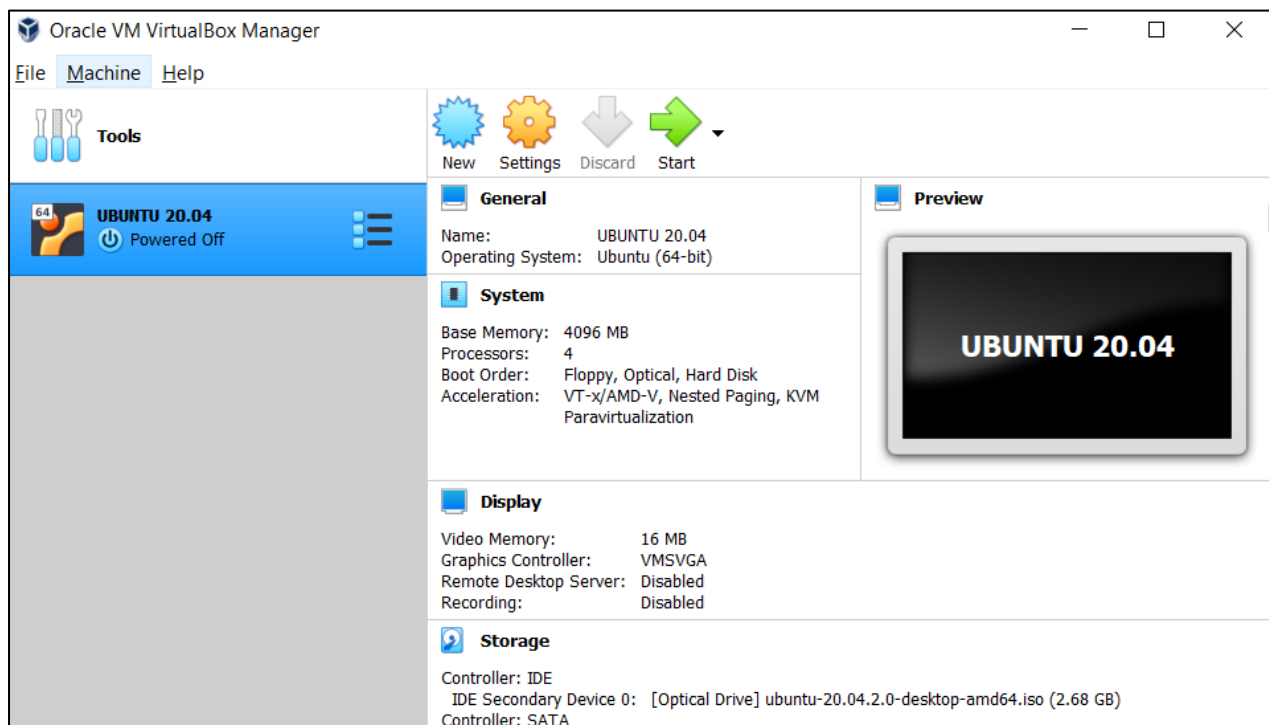
17. Now select the **UBUNTU 20.04 LTS ISO** file which you have downloaded earlier.



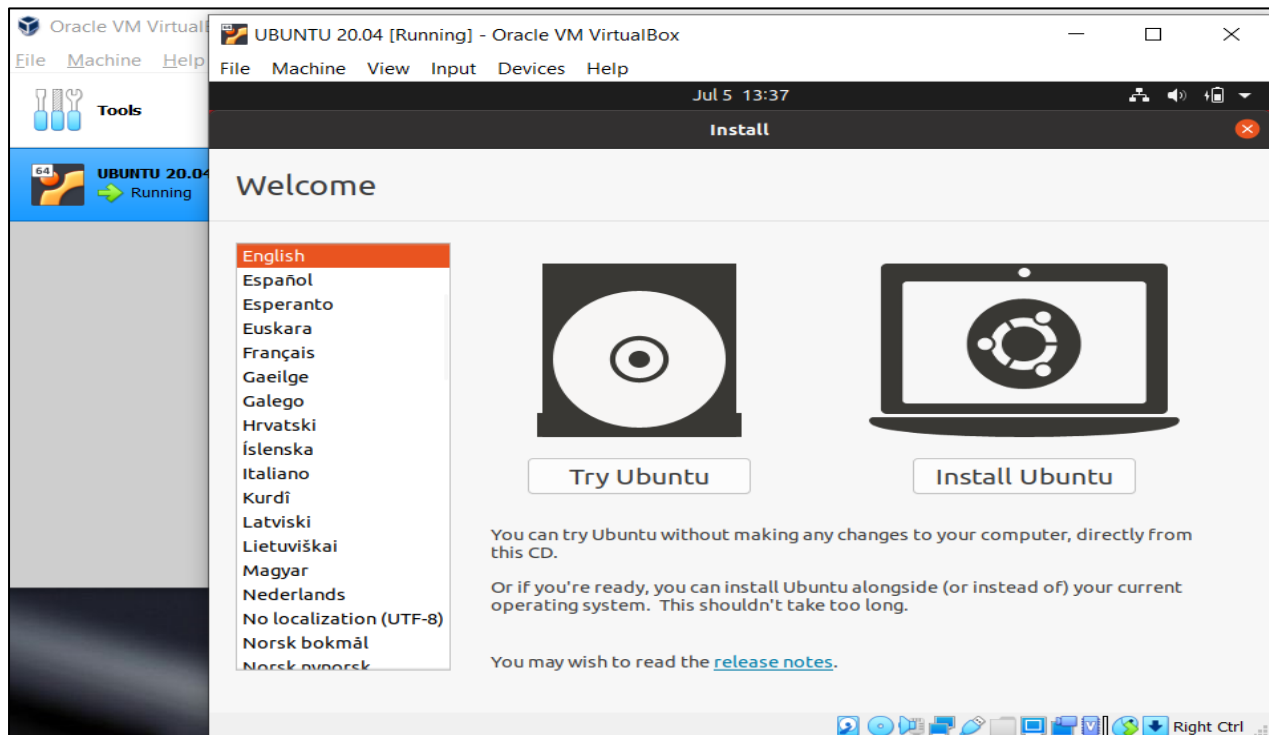
18. You have selected the **UBUNTU ISO** file. Now click on **OK** button.



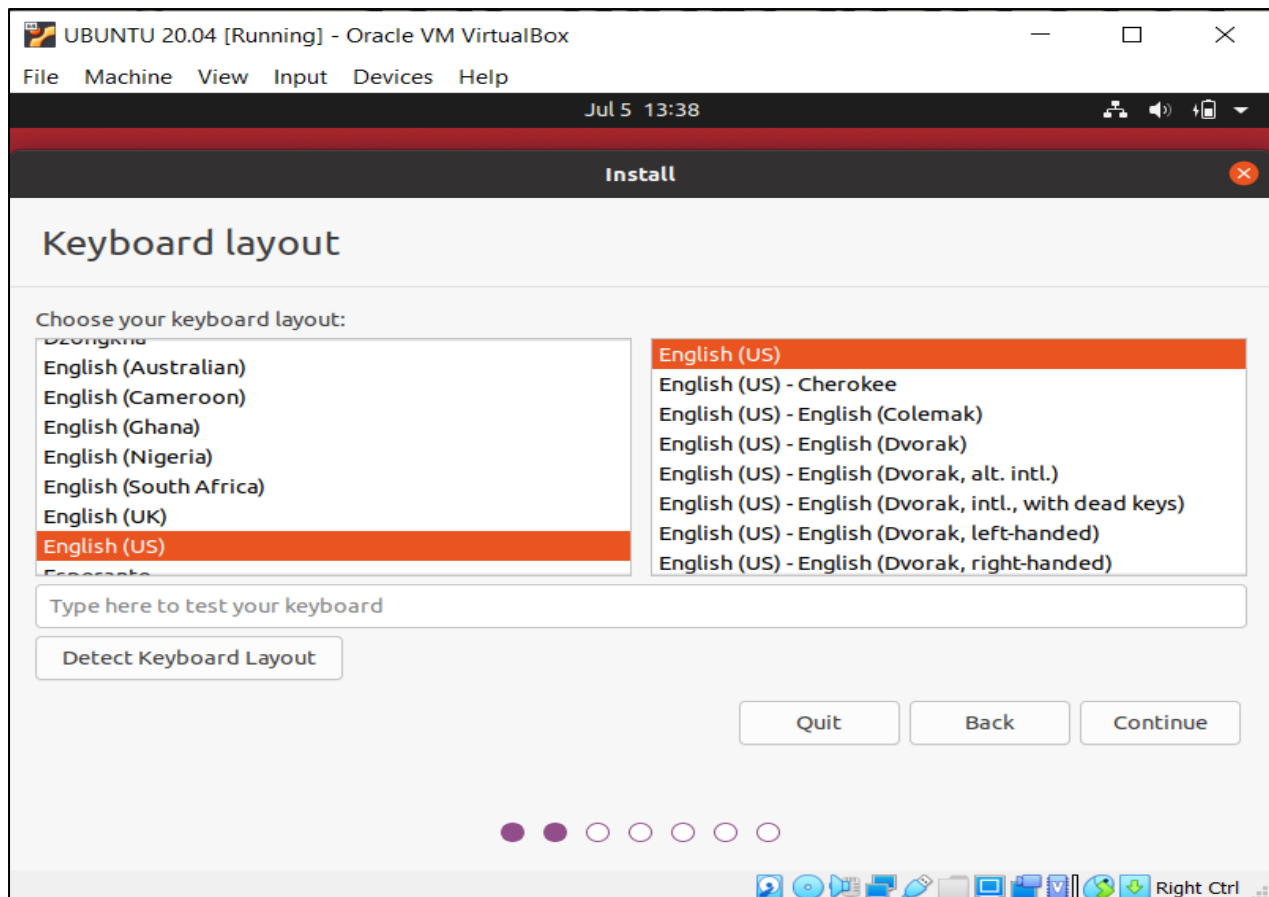
19. Now select your **UBUNTU** machine and click on **START** as shown in the below screenshot.



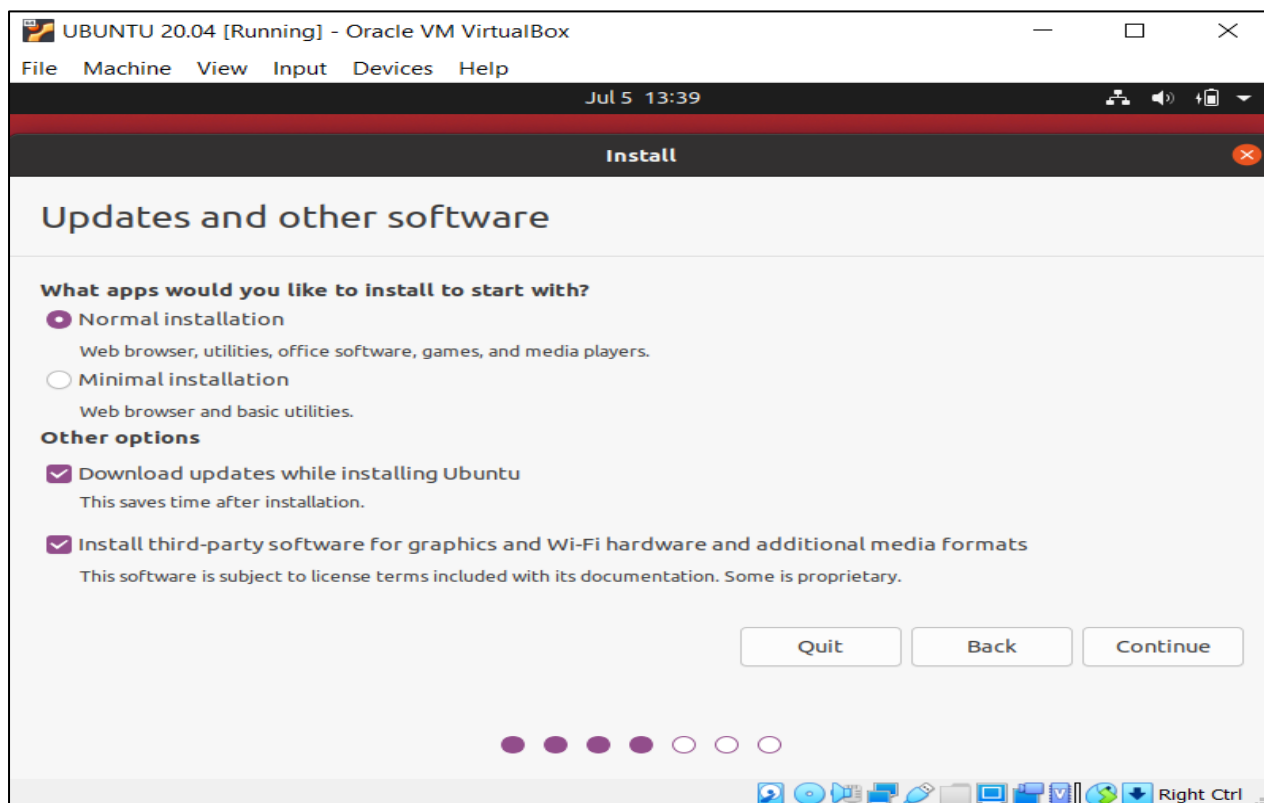
20. Now select **language** as **ENGLISH** and click on **INSTALL UBUNTU** option.



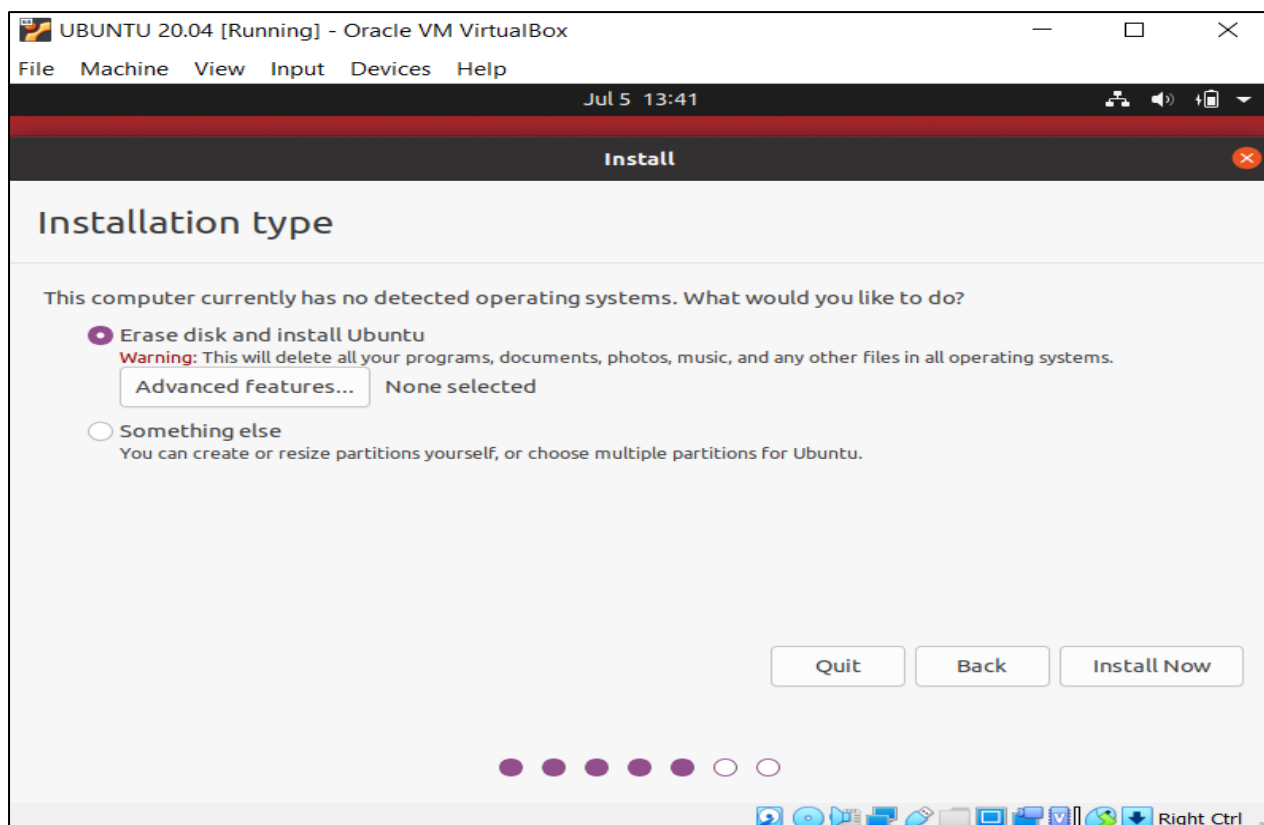
21. Now select the **Keyboard Layout** as **ENGLISH (US)** and click on **continue**.



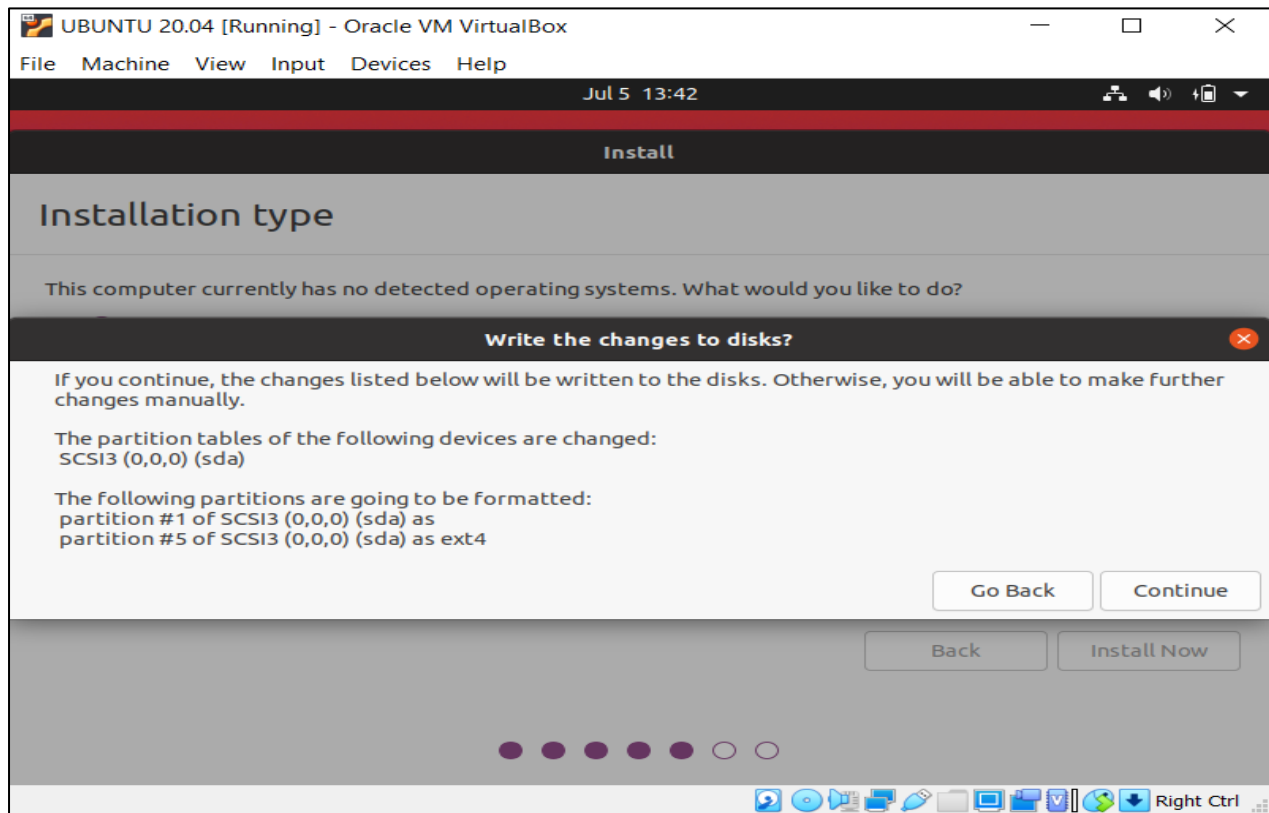
22. Now select the options as mentioned below in the screenshot and click on **continue**.



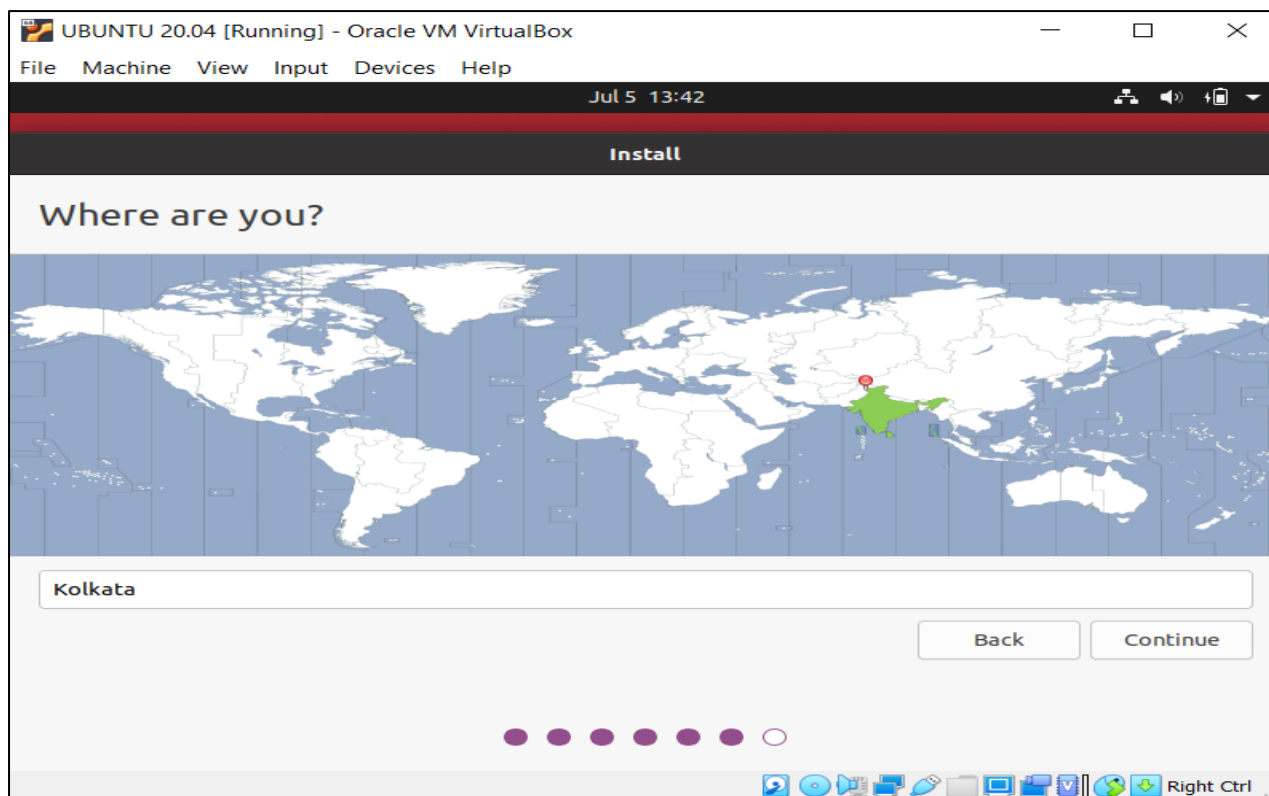
23. Now select the **DEFAULT** options and click on **INSTALL NOW**.



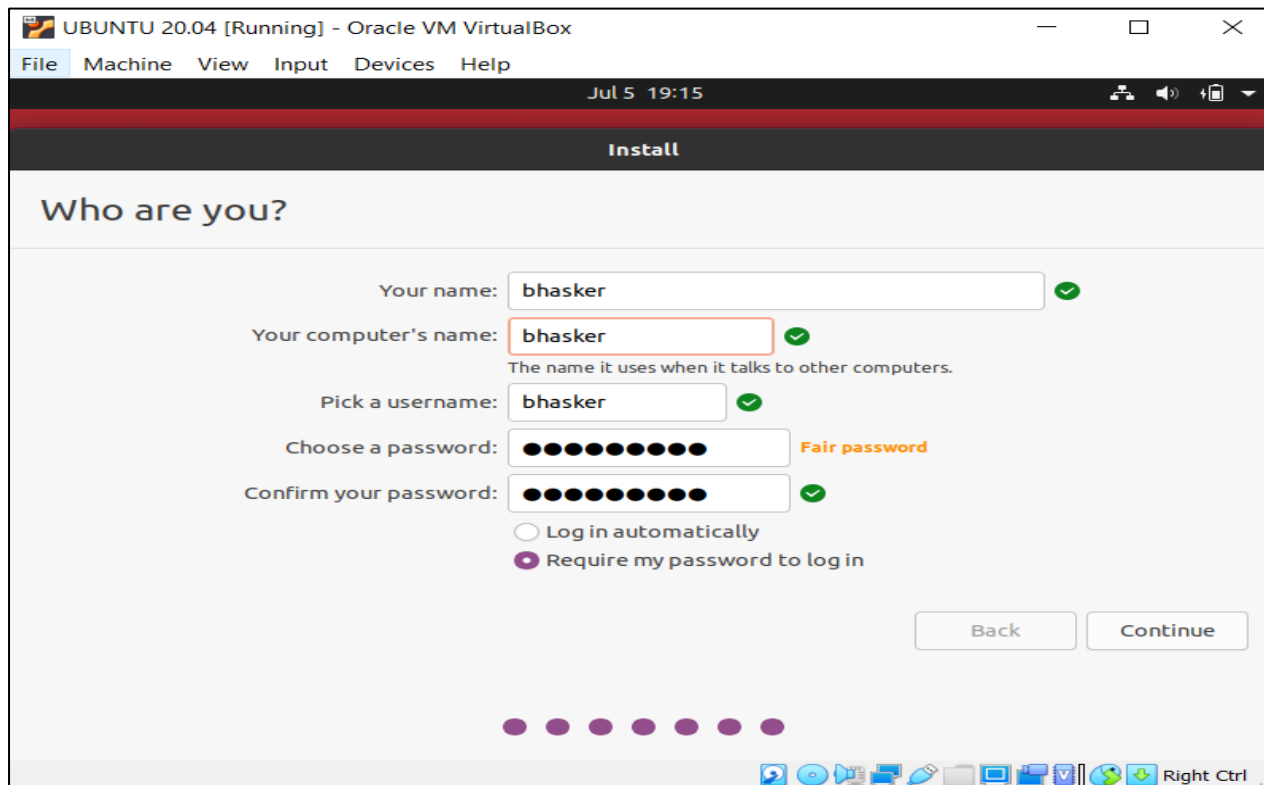
24. You can see the **POPUP**, click on **continue** option.



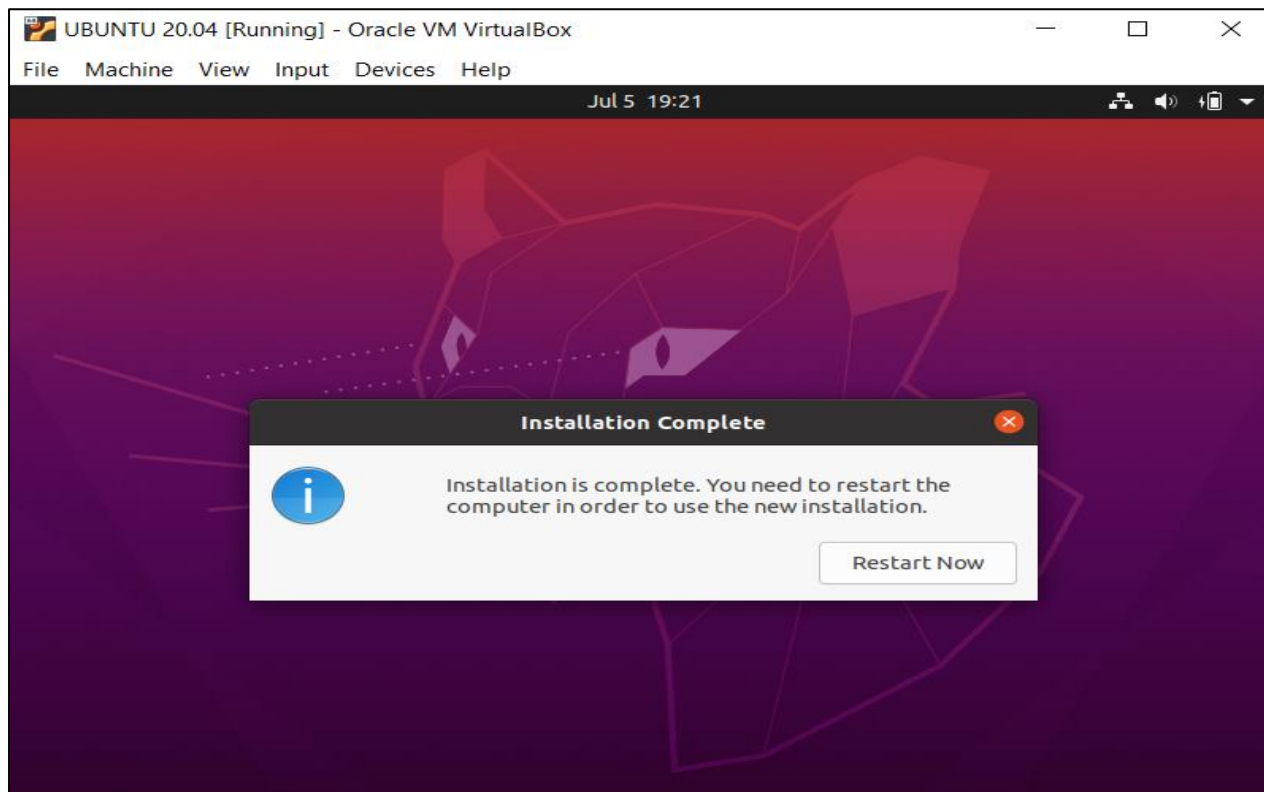
25. Now select your **LOCATION** and click on **continue**.



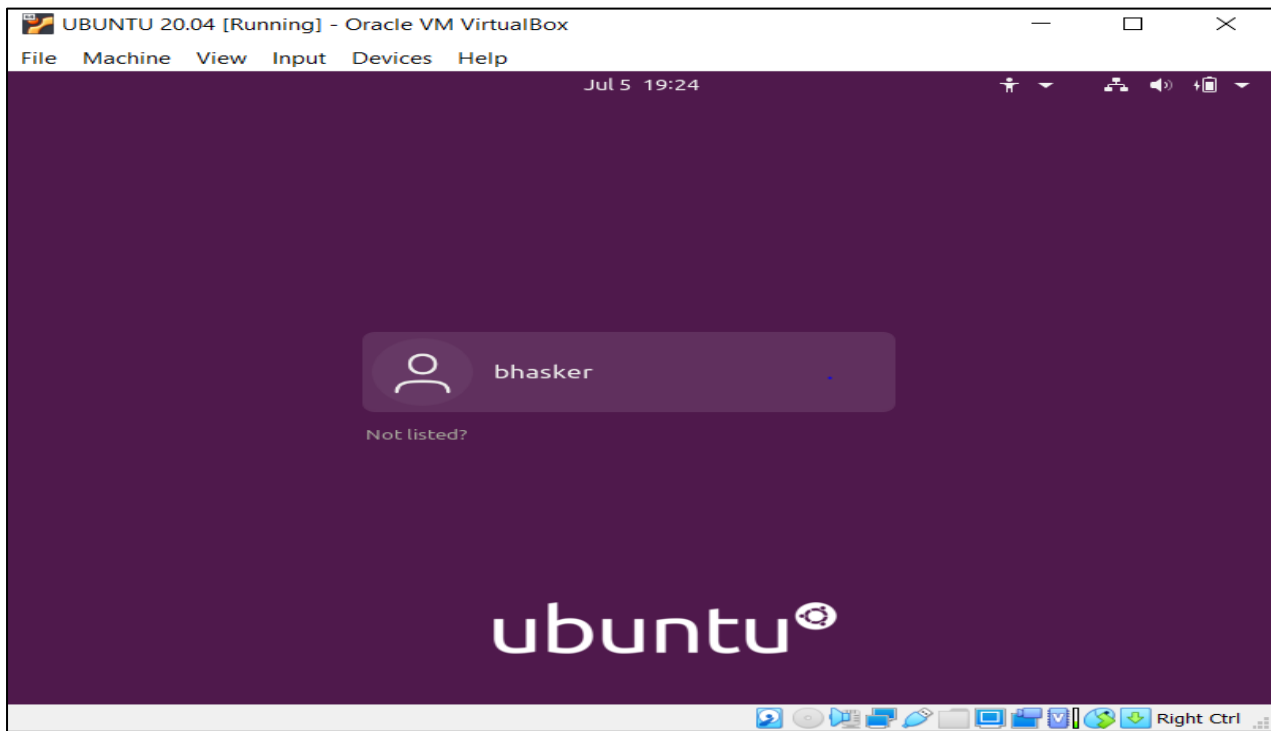
26. Now set your **USERNAME** and **PASSWORD** as shown in the below screenshot and click on **continue**.



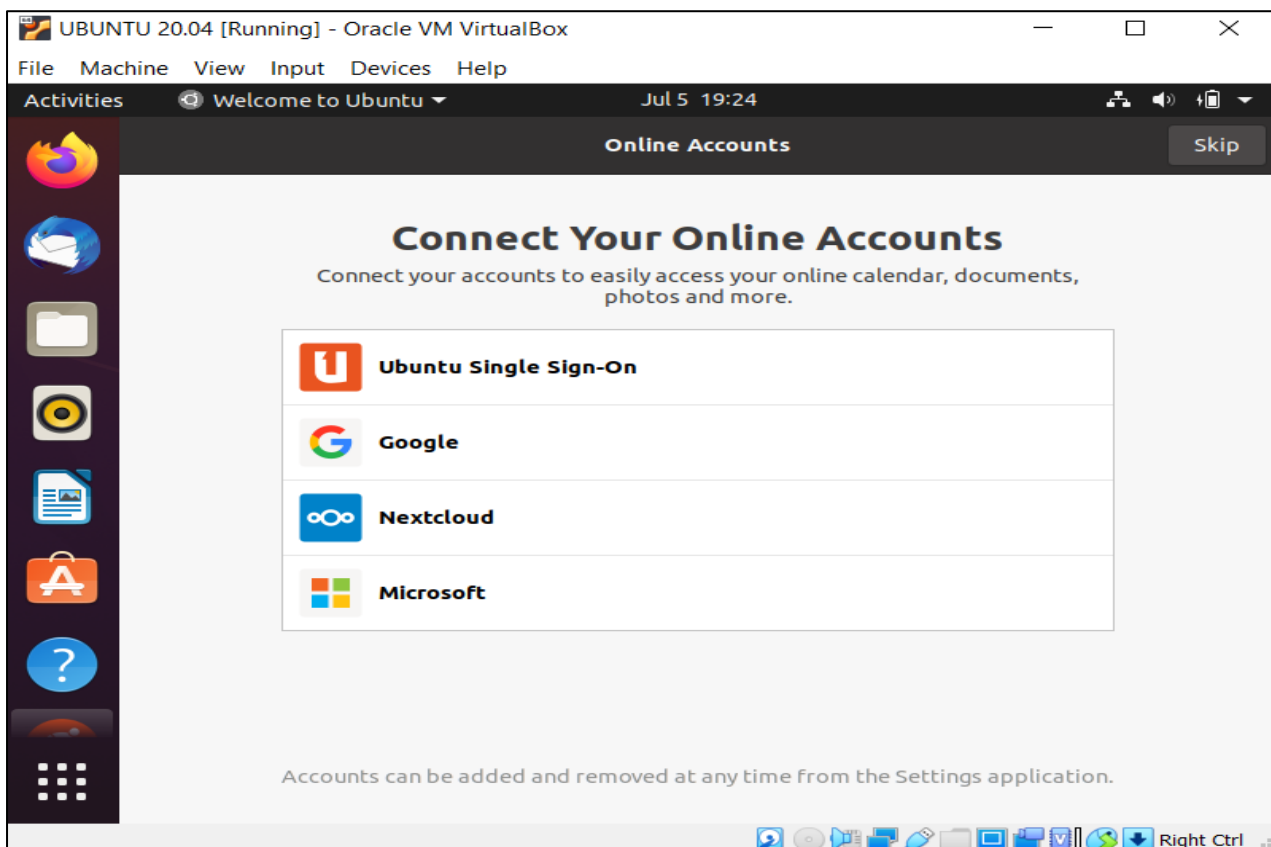
27. Now **UBUNTU** installation is completed successfully. Click on **RESTART NOW** button.



28. Once **UBUNTU** machine is restarted successfully. Login back to **UBUNTU** machine using **USERNAME** and **PASSWORD**.

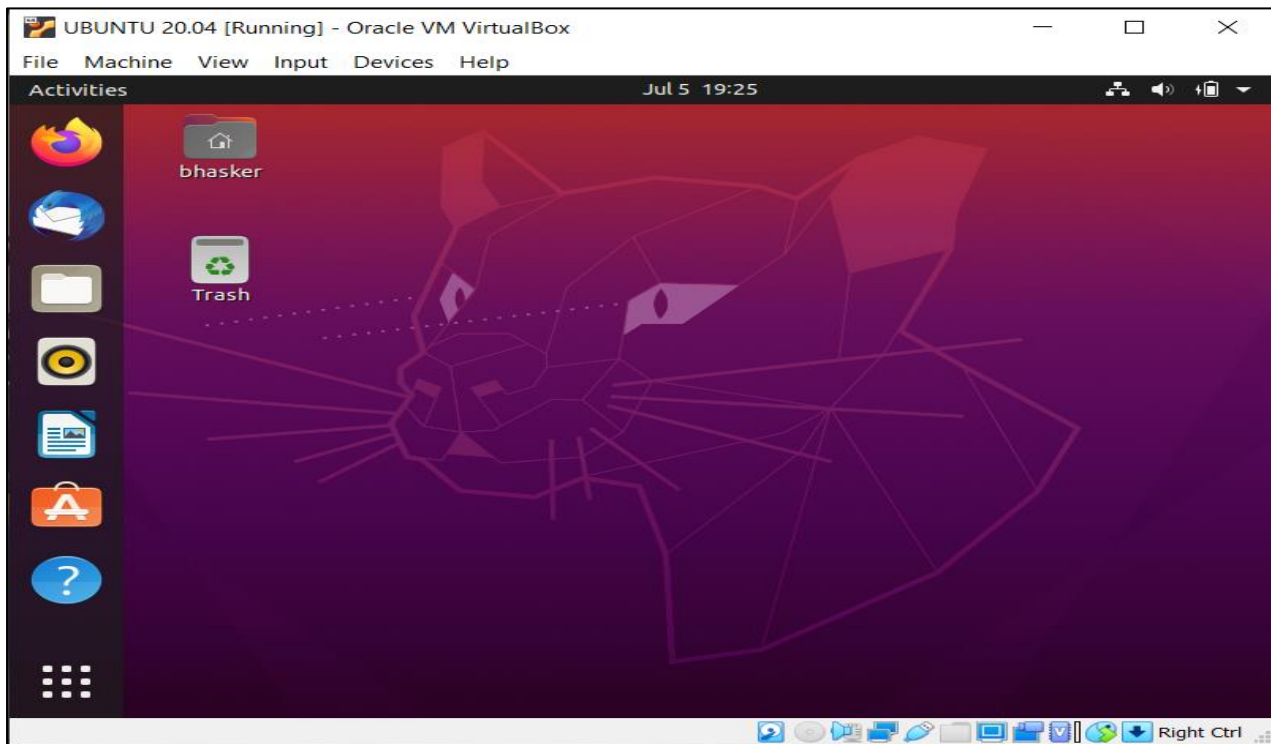


29. **SKIP** the initial setup as shown in the below screenshot.

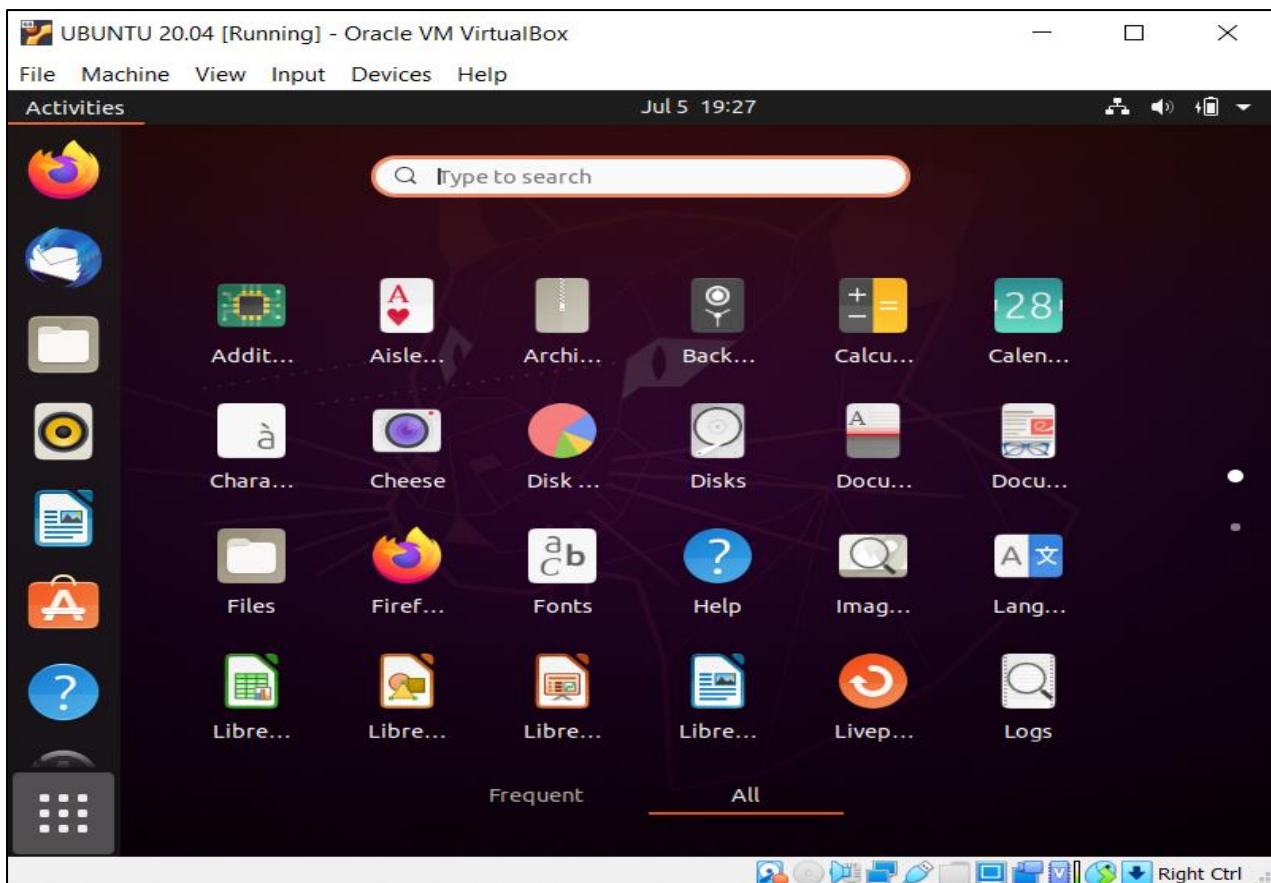




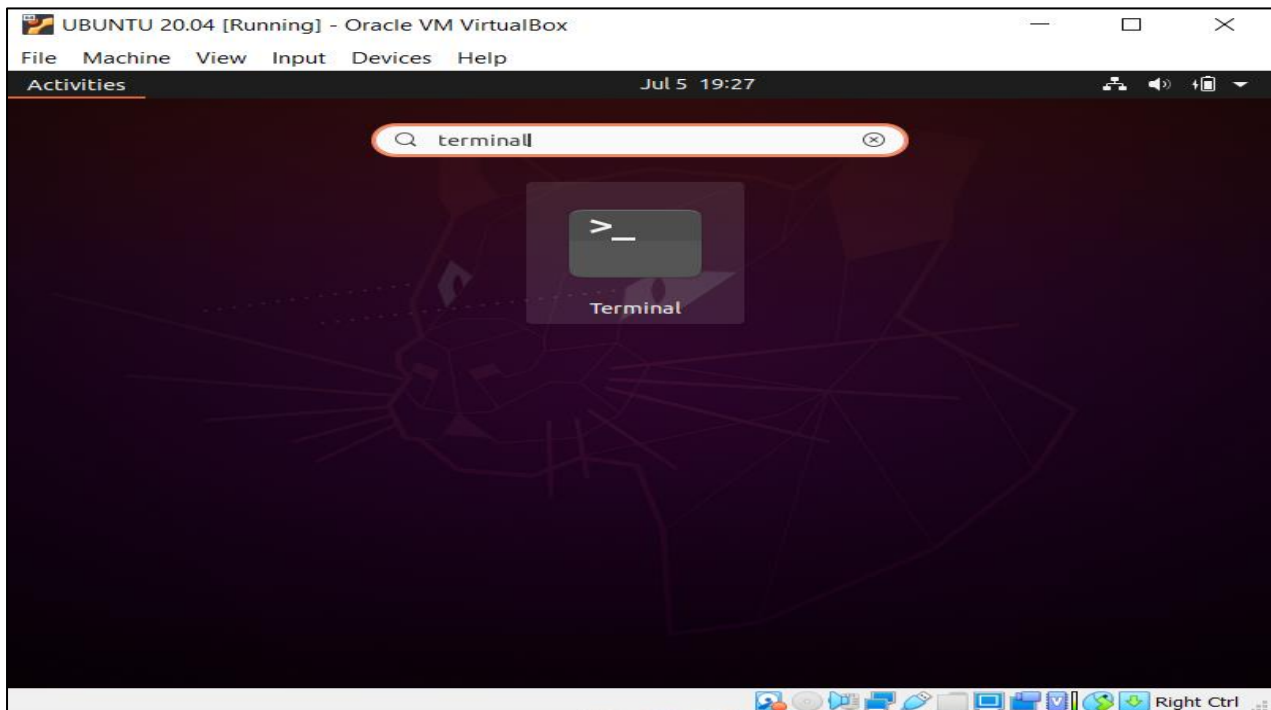
30. Now **UBUNTU** machine is ready to use as shown in the below screenshot.



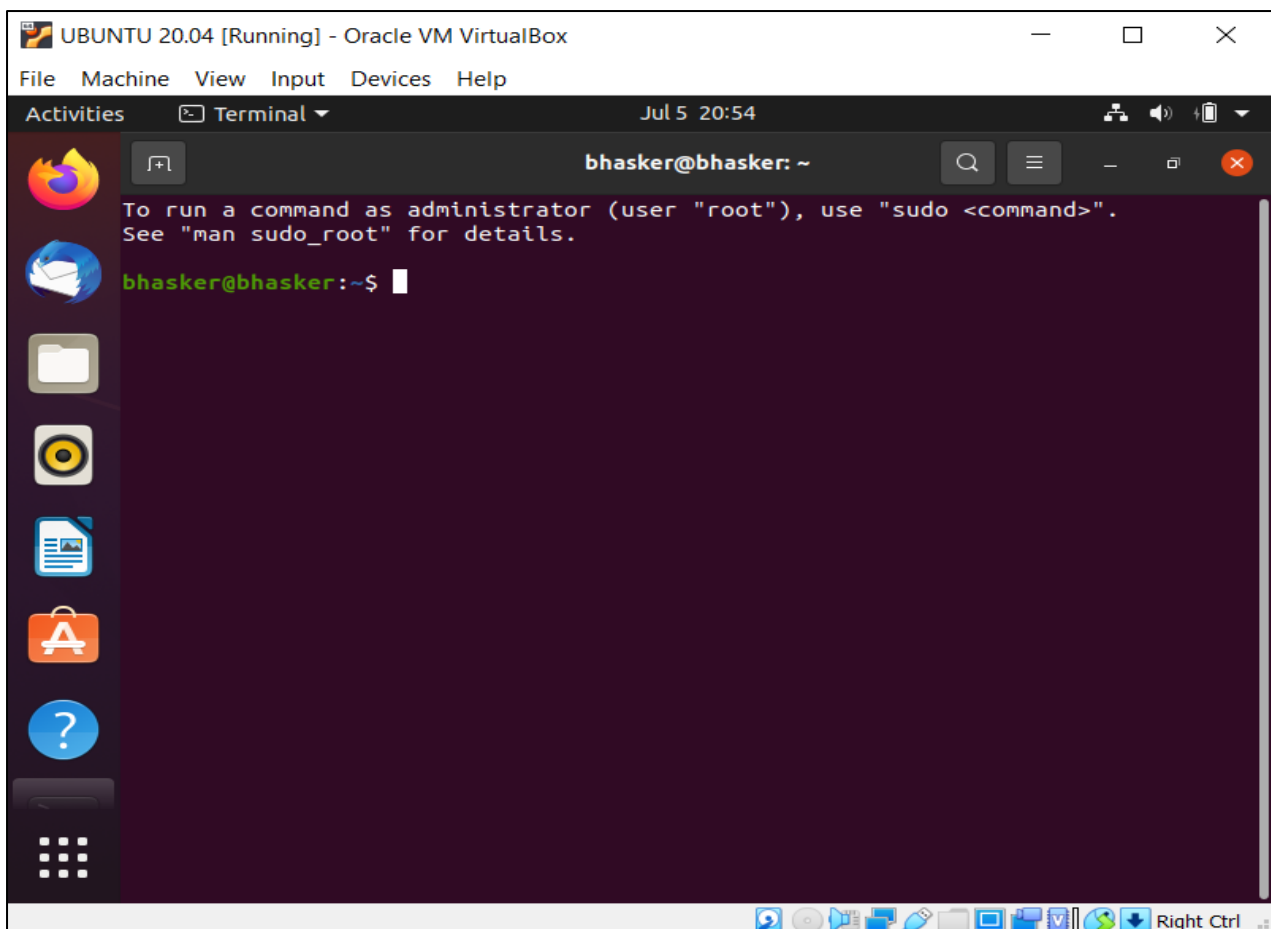
31. Now click on **bottom left icon** to open all applications as shown in the below screenshot.



32. Now search for **TERMINAL** and click on **TERMINAL** icon.

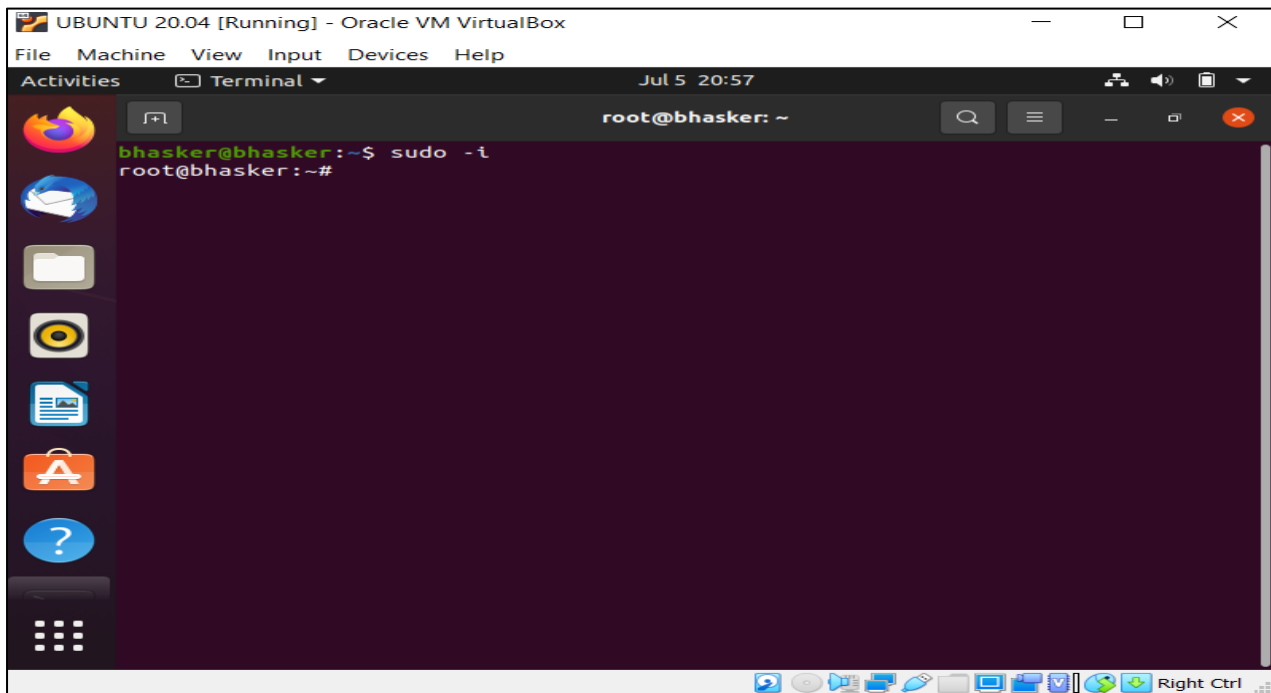


33. Now **UBUNTU** terminal is opened successfully as shown in the below screenshot.



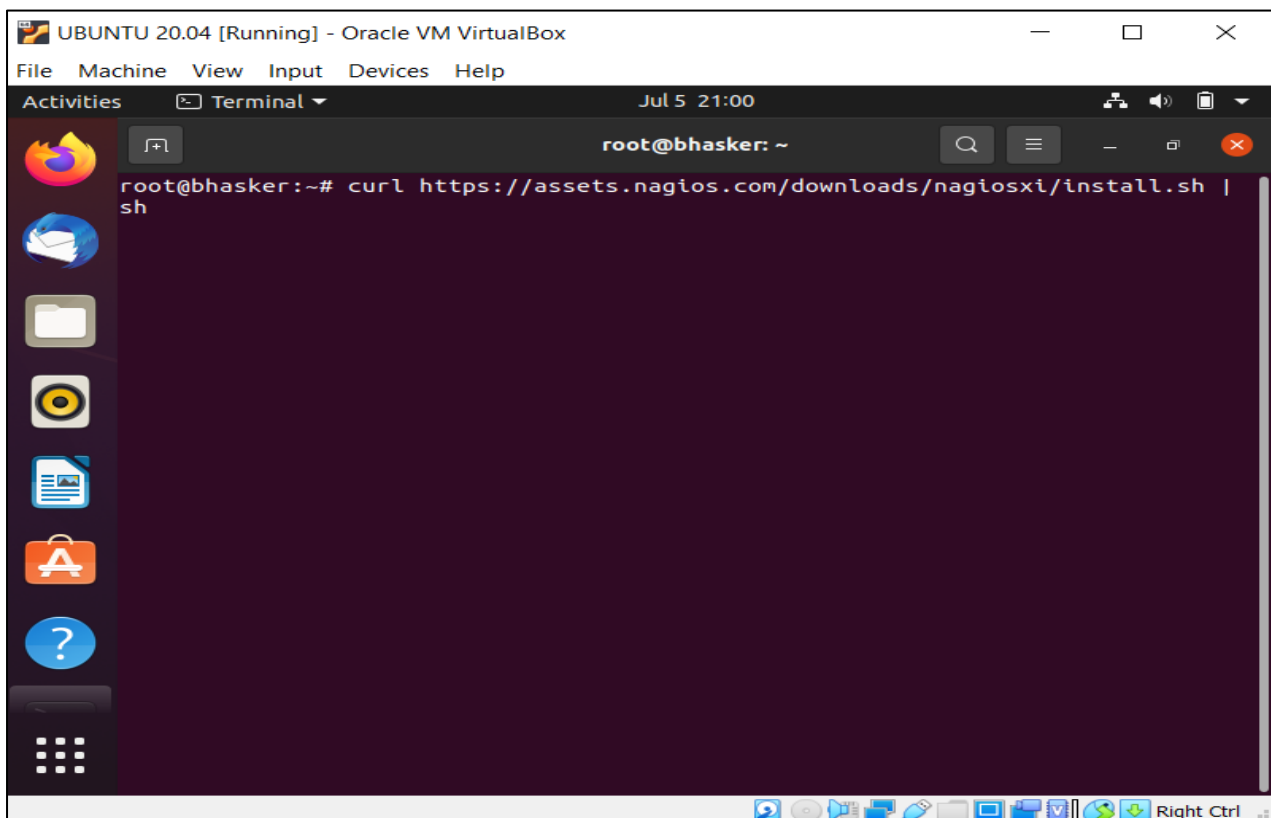
34. Change your privileges to **ROOT** using command:

**sudo -i**

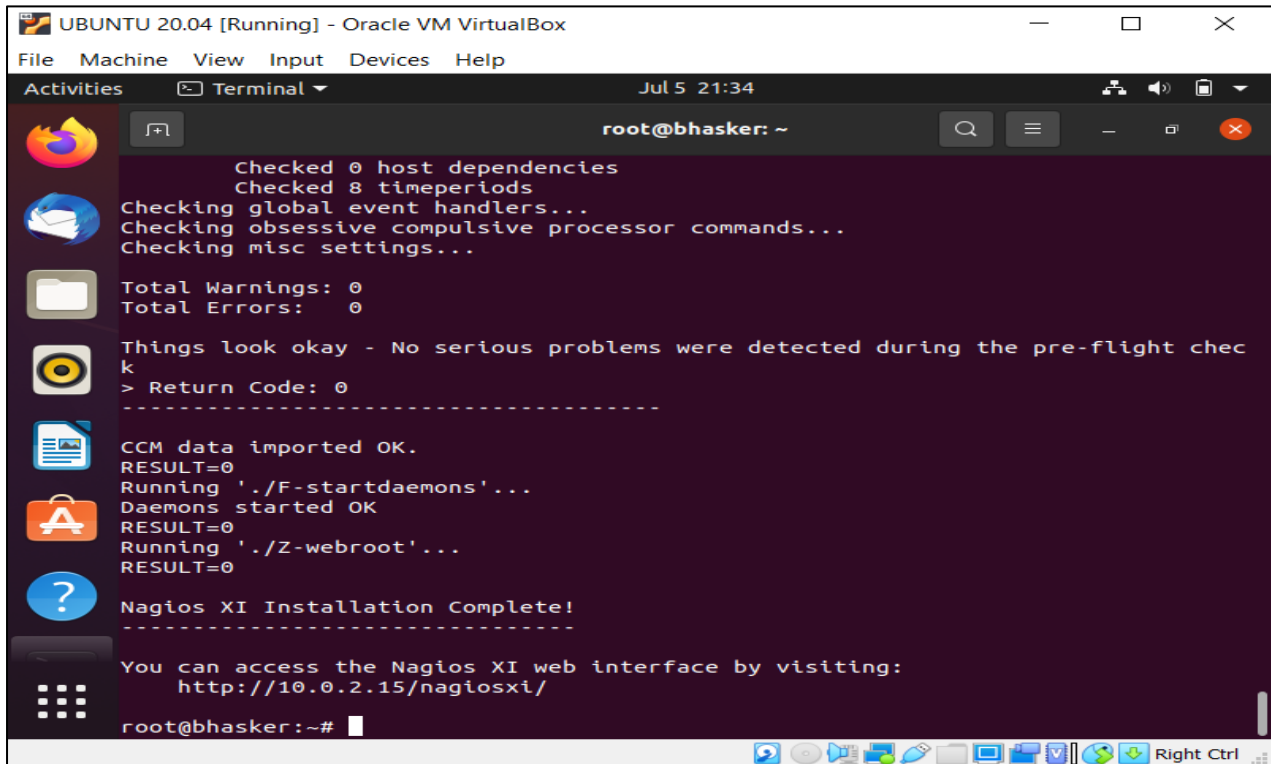


35. Use the below command to run the **script** that **INSTALL** and **CONFIGURE NAGIOSXI** on **UBUNTU** server.

**curl https://assets.nagios.com/downloads/nagiosxi/install.sh | sh**



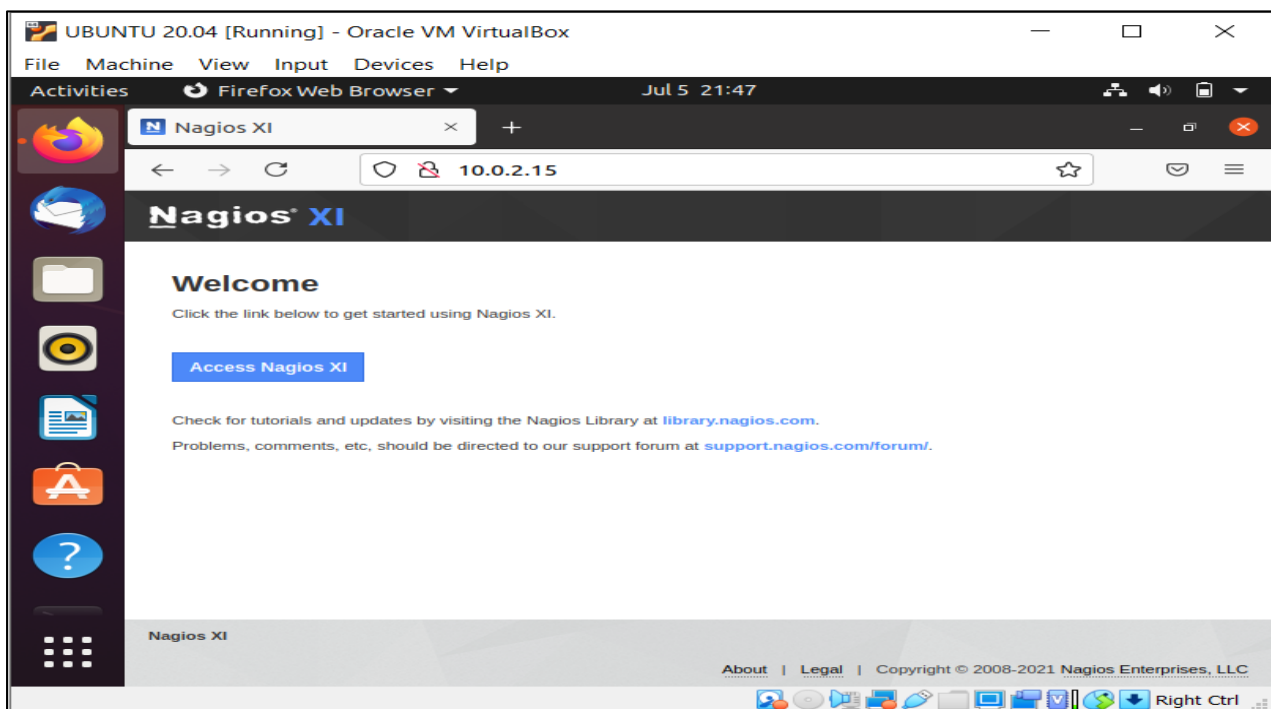
36. It can take up to **20 minutes** to **INSTALL** and **CONFIGURE NAGIOSXI**. Once done you can see the status as **NAGIOSXI Installation Complete!**.



The screenshot shows a terminal window titled 'UBUNTU 20.04 [Running] - Oracle VM VirtualBox'. The terminal output indicates the installation of Nagios XI is complete. The output includes: 'Checked 0 host dependencies', 'Checked 8 timeperiods', 'Checking global event handlers...', 'Checking obsessive compulsive processor commands...', 'Checking misc settings...', 'Total Warnings: 0', 'Total Errors: 0', 'Things look okay - No serious problems were detected during the pre-flight check', '> Return Code: 0', 'CCM data imported OK. RESULT=0', 'Running './F-startdaemons'...', 'Daemons started OK. RESULT=0', 'Running './Z-webroot'...', 'RESULT=0', 'Nagios XI Installation Complete!', and 'You can access the Nagios XI web interface by visiting: http://10.0.2.15/nagiosxi/'. The prompt is 'root@bhasker:~#'.

```
root@bhasker: ~  
Checked 0 host dependencies  
Checked 8 timeperiods  
Checking global event handlers...  
Checking obsessive compulsive processor commands...  
Checking misc settings...  
Total Warnings: 0  
Total Errors: 0  
Things look okay - No serious problems were detected during the pre-flight check  
> Return Code: 0  
-----  
CCM data imported OK.  
RESULT=0  
Running './F-startdaemons'...  
Daemons started OK  
RESULT=0  
Running './Z-webroot'...  
RESULT=0  
Nagios XI Installation Complete!  
-----  
You can access the Nagios XI web interface by visiting:  
http://10.0.2.15/nagiosxi/  
root@bhasker:~#
```

37. Now copy the **NAGIOSXI** web address (<http://<ip-address>/nagiosxi/>) and paste it on **FIREFOX** browser as shown in the below screenshot. **NAGIOSXI** loaded successfully. Now click on **ACCESS NAGIOSXI**.



**38.** You are navigated to **NAGIOSXI INSTALLATION** page as shown below in the screenshot.

The screenshot shows the Nagios XI Installation page. The header includes the Nagios XI logo and the word "Install". The main heading is "Nagios XI Installation" with a subtext: "Finalize your Nagios XI installation and step the initial configuration. These settings can be changed later."

**General System Settings**

- Program URL:
- Timezone:
- Language:
- User Interface Theme:
- ☐ Use HTTPS only (all HTTP requests will be redirected to HTTPS)

**License Settings**

- License Type: ☒ Trial ☐ Licensed ☐ Free (Limited)
- Trial includes unlimited nodes + enterprise features. Includes access to trial support.
- [Click to get a trial key](#)
- Trial Key:

**39.** Now change the **TIMEZONE** and click on **Click to get trial key** option under **License settings**.

The screenshot shows the Nagios XI Installation page with changes. The header includes the Nagios XI logo and the word "Install". The main heading is "Nagios XI Installation" with a subtext: "Finalize your Nagios XI installation and step the initial configuration. These settings can be changed later."

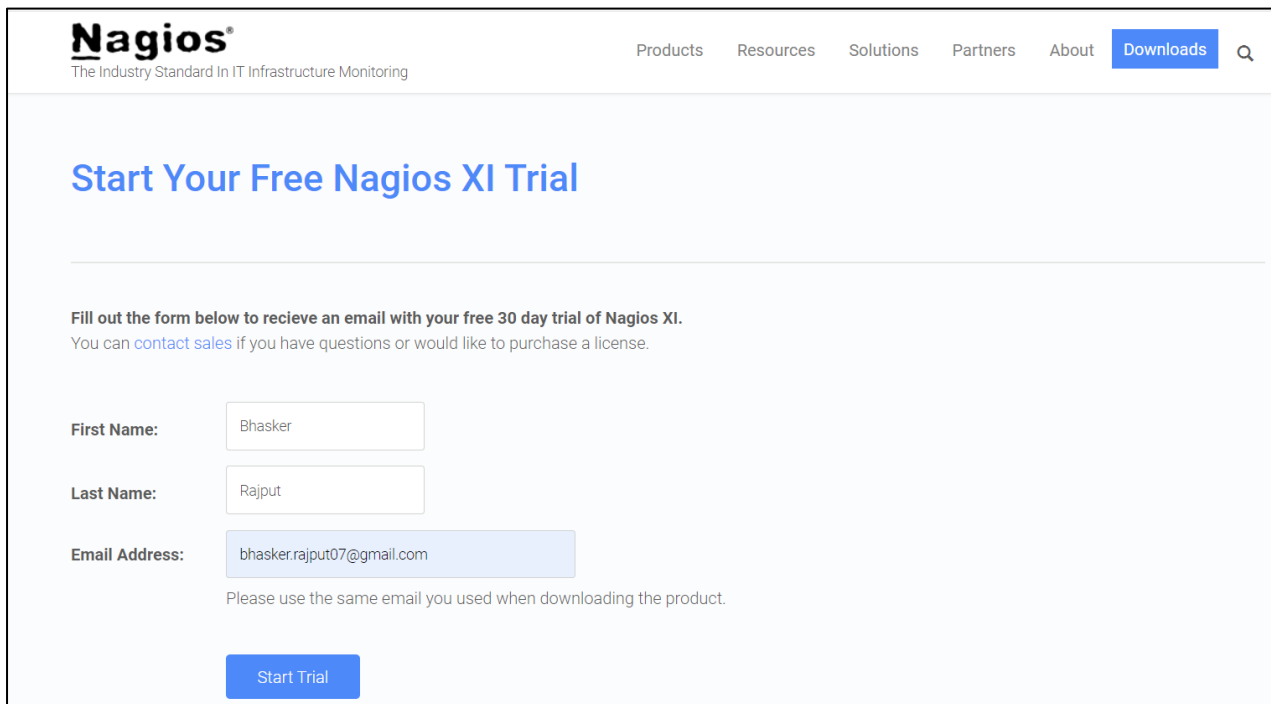
**General System Settings**

- Program URL:
- Timezone:
- Language:
- User Interface Theme:
- ☐ Use HTTPS only (all HTTP requests will be redirected to HTTPS)

**License Settings**

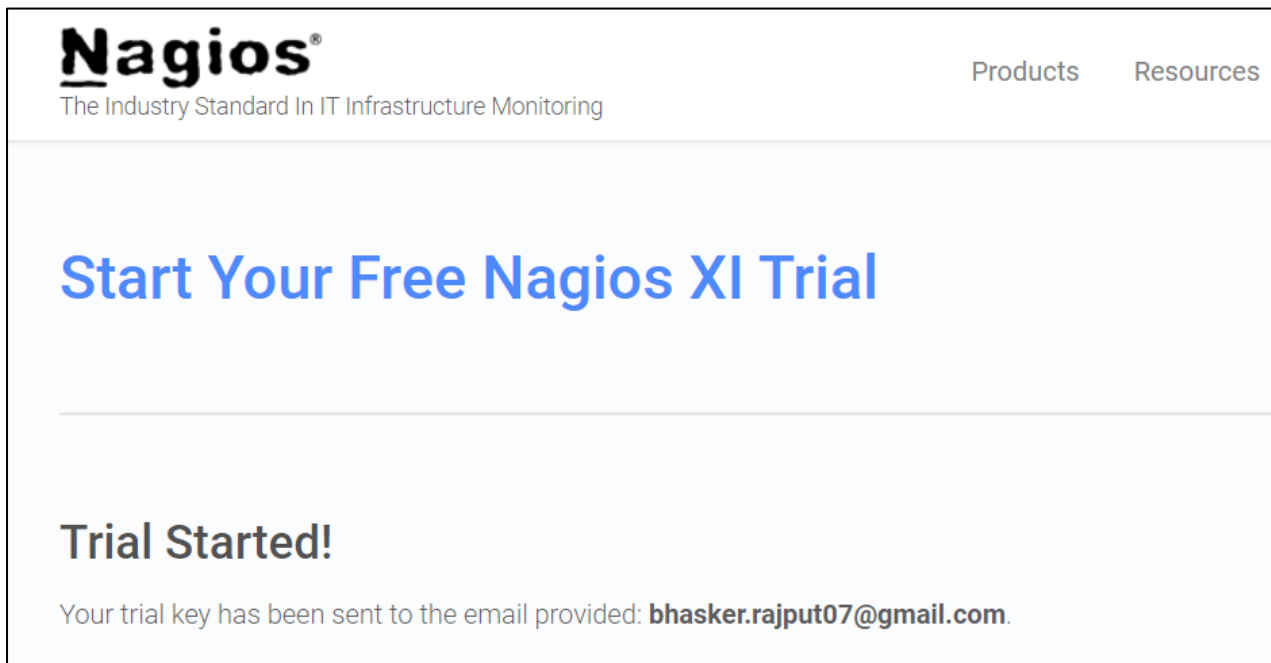
- License Type: ☒ Trial ☐ Licensed ☐ Free (Limited)
- Trial includes unlimited nodes + enterprise features. Includes access to trial support.
- [Click to get a trial key](#)
- Trial Key:

**40.** Provide **First name**, **Last name** and **Email address** and click on **START TRIAL**.



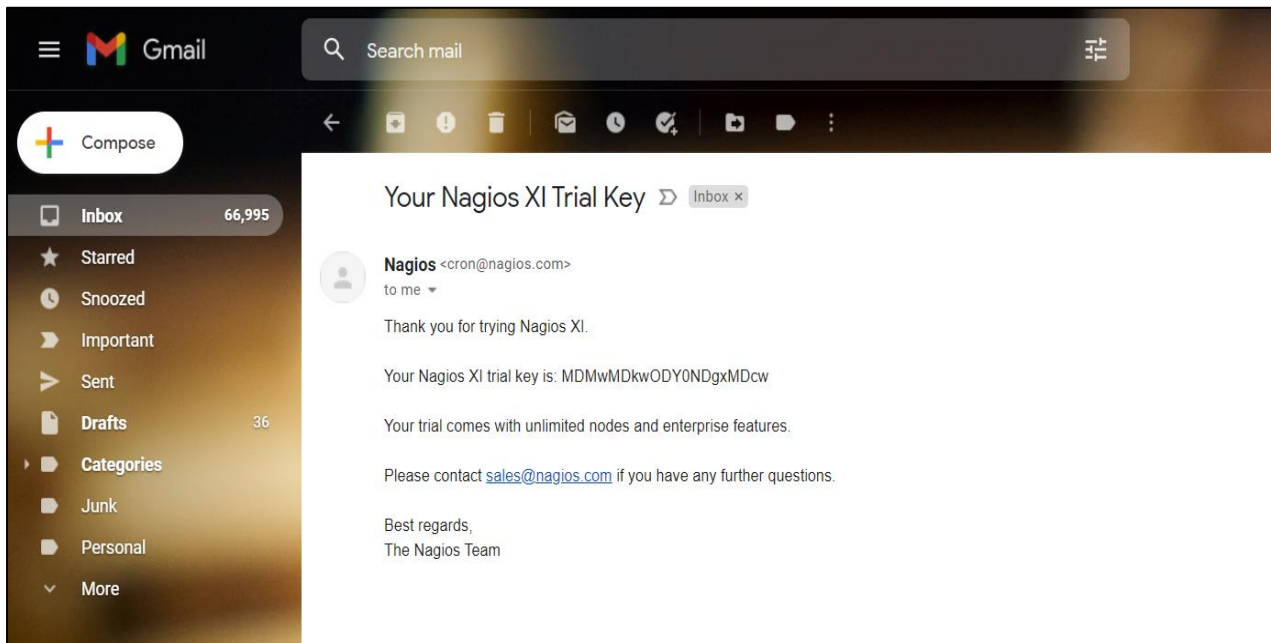
The screenshot shows the Nagios XI website's trial registration page. The header includes the Nagios logo, tagline 'The Industry Standard In IT Infrastructure Monitoring', and navigation links: Products, Resources, Solutions, Partners, About, and a highlighted Downloads button with a search icon. The main heading is 'Start Your Free Nagios XI Trial'. Below it, a message states: 'Fill out the form below to receive an email with your free 30 day trial of Nagios XI. You can [contact sales](#) if you have questions or would like to purchase a license.' The form consists of three input fields: 'First Name' with the value 'Bhasker', 'Last Name' with the value 'Rajput', and 'Email Address' with the value 'bhasker.rajput07@gmail.com'. A note below the email field says 'Please use the same email you used when downloading the product.' At the bottom is a blue 'Start Trial' button.

**41.** You can see the message **TRIAL STARTED**.



The screenshot shows the Nagios XI website's trial confirmation page. The header includes the Nagios logo, tagline 'The Industry Standard In IT Infrastructure Monitoring', and navigation links: Products and Resources. The main heading is 'Start Your Free Nagios XI Trial'. Below it, the message 'Trial Started!' is displayed in a large font. Underneath, it states: 'Your trial key has been sent to the email provided: **bhasker.rajput07@gmail.com**.'

42. Navigate to your **EMAIL ADDRESS** and **copy** the **TRIAL KEY** as mentioned in the below screenshot.



43. Provide the **TRIAL KEY** and click on **NEXT** button.

A screenshot of the Nagios XI web interface. The "General System Settings" section includes fields for "Program URL" (https://35.193.140.255/nagiosxi/), "Timezone" ((UTC+05:30) New Delhi), "Language" (English (English)), and "User Interface Theme" (Modern). There is a checkbox for "Use HTTPS only (all HTTP requests will be redirected to HTTPS)". The "License Settings" section shows "License Type" with "Trial" selected, "Trial Key" (MDMwMDkwODY0NDgxMDcw), and a "Next >" button at the bottom.

**44.** Save **username** and **password** in your local system and click on **FINISH INSTALL**.


## Nagios XI Installation


Finalize your Nagios XI installation and step the initial configuration. These settings can be changed later.

### Admin Account Settings

Username	<input type="text" value="nagiosadmin"/>
Password	<input type="password" value="Gcmg5qj@Tso#s5#sapXE"/>
Full Name	<input type="text" value="Nagios Administrator"/>
Email Address	<input type="text" value="root@localhost"/>


### Admin Notification Settings

☒ Send this account email notifications  [Advanced email notification settings](#)

 Back

✓ Finish Install

**45.** Now you are navigated to **NAGIOSXI** login page. Provide **username** and **password** to login.


 Login


### Login

Login

[Forgot your password?](#)

Select Languages:





### Nagios Products

XI

F

LS

NA

#### Nagios XI

Provides monitoring of all mission-critical infrastructure components including applications, services, operating systems, network protocols, systems metrics, and network infrastructure. Hundreds of third-party add-ons provide for monitoring of virtually all in-house applications, services, and systems.



## 46. ACCEPT the License Agreement.

**Nagios XI**

HomeViewsDashboardsReportsConfigureToolsHelpAdmin

Notice: This trial copy of Nagios XI will expire in 30 days. [Purchase a License Now](#) or [Enter your license key](#).

## License Agreement

You must agree to the Nagios Software License Terms and Conditions before continuing using this software.

Nagios Software License Terms and Conditions

PLEASE READ THIS AGREEMENT CAREFULLY BEFORE PURCHASING OR USING NAGIOS SOFTWARE. BY PURCHASING OR USING NAGIOS ENTERPRISES' SOFTWARE, YOU SIGNIFY YOUR ASSENT TO THIS AGREEMENT. IF YOU ARE ACTING ON BEHALF OF AN ENTITY, THEN YOU REPRESENT THAT YOU HAVE THE AUTHORITY TO ENTER INTO THIS AGREEMENT ON BEHALF OF THAT ENTITY. IF YOU DO NOT ACCEPT THE TERMS OF THIS AGREEMENT, THEN YOU MUST NOT PURCHASE OR USE NAGIOS SOFTWARE.

This Software License Terms and Conditions Agreement ("Agreement") is a legal agreement between Nagios Enterprises, LLC ("Nagios Enterprises") and the purchaser or user of Nagios Software ("Customer"). The effective date of this Agreement ("Effective Date") is the earlier of the date that Customer signs or accepts this Agreement or the date that Customer purchases or begins using Nagios Software.

### 1 DEFINITIONS

For the purposes of this Agreement, the following terms shall have the following meanings:

1.1 Nagios Software. All commercial and proprietary software programs, configurations, scripts, images, and intellectual property contained in Nagios Enterprises' commercial products and developed by, owned by, or licensed to Nagios Enterprises, with the exclusion of Third Party Software.

1.2 Third Party Software. Any software programs, configurations, scripts, images, and intellectual property contained in or distributed with Nagios Enterprises' products, with the exclusion of Nagios Software, made available in source code, object code form, or other

☒ I have read, understood, and agree to be bound by the terms of the license above.

Submit

## 47. Now you are successfully logged in to NAGIOSXI application as shown in the below screenshot.

**Nagios XI**

HomeViewsDashboardsReportsConfigureToolsHelpAdmin

Notice: This trial copy of Nagios XI will expire in 30 days. [Purchase a License Now](#) or [Enter your license key](#).

Quick View

Home Dashboard

Tactical Overview

Birdseye

Operations Center

Operations Screen

Open Service Problems

Open Host Problems

All Service Problems

All Host Problems

Network Outages

Details

Service Status

Host Status

Hostgroup Summary

Hostgroup Overview

Hostgroup Grid

Servicegroup Summary

Servicegroup Overview

Servicegroup Grid

BPI

Metrics

Graphs

Performance Graphs

Graph Explorer

Maps

World Map

BBmap

Hypermap

Minemap

NagVis

Network Status Map

## Home Dashboard

### Getting Started Guide

**Common Tasks:**

- [Change your account settings](#)  
Change your account password and general preferences.
- [Change your notifications settings](#)  
Change how and when you receive alert notifications.
- [Configure your monitoring setup](#)  
Add or modify items to be monitored with easy-to-use wizards.

**Getting Started:**

- [Learn about XI](#)  
Learn more about XI and its capabilities.
- [Signup for XI news](#)  
Stay informed on the latest updates and happenings for XI.

### Administrative Tasks

Task
Initial Setup Tasks:
<a href="#">Configure custom settings</a>

### Host Status Summary

Up	Down	Unreachable	Pending
11	0	0	0
Unhandled		Problems	
0		1	

Last Updated: 2021-06-26 04:38:47


### Service Status Summary

Ok	Warning	Unknown	Critical	Pending
11	0	0	0	0
Unhandled		Problems		All
1		1		12

Last Updated: 2021-06-26 04:38:47


### We're Here To Help!


Our knowledgeable techs are happy to help you with any questions or problems you may have getting Nagios up and running.




- [Support Forum / Customer Support Forum](#)
- [Help Resources](#)
- [Customer Ticket Support Center](#)
- [Customer Phone Support: +1 651-204-9102 Ext. 4](#)

### Start Monitoring

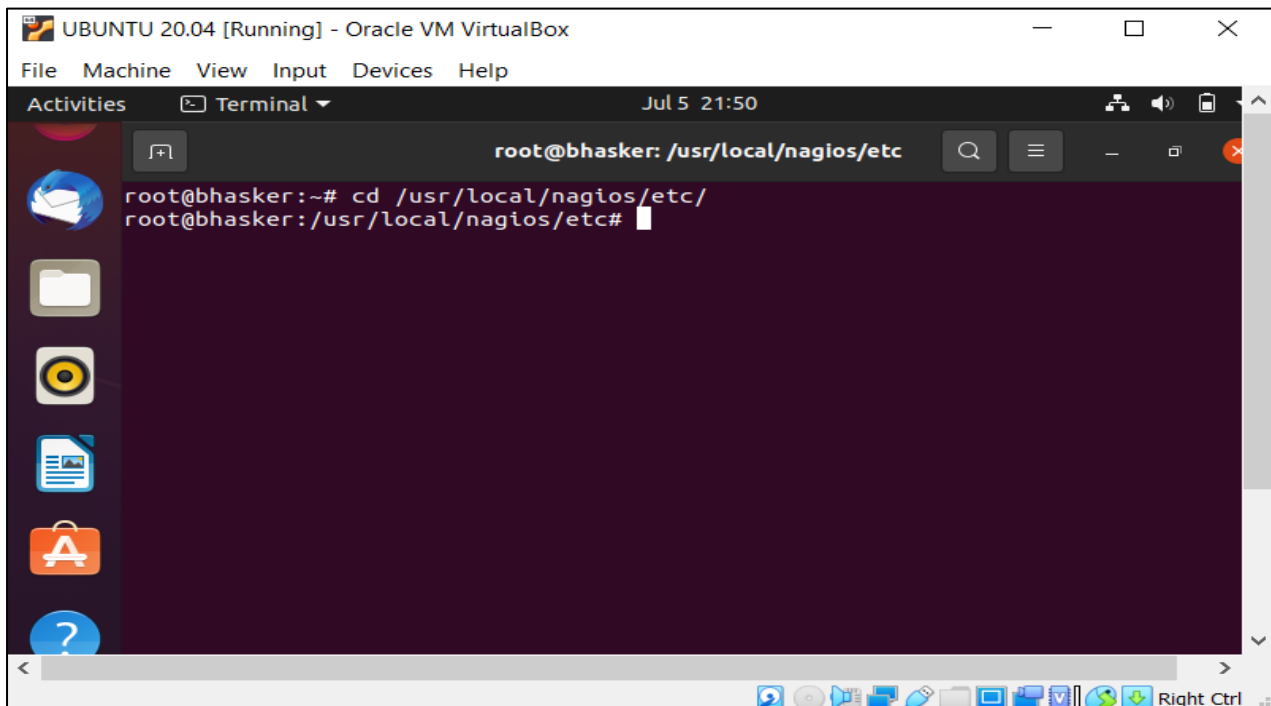
 Run a Config Wizard

 Run Auto-Discovery



48. Navigate back to **UBUNTU** terminal and use the below path to check the **nagios.cfg** file.

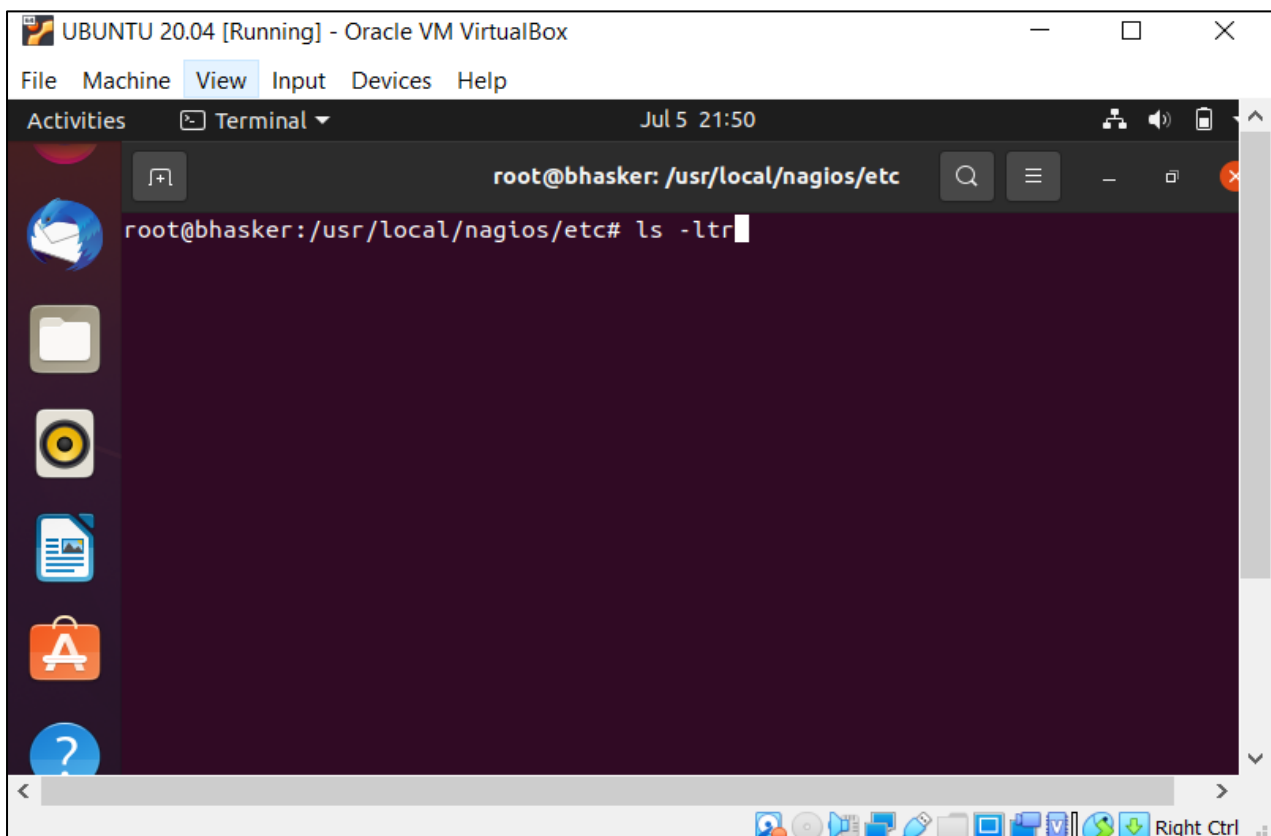
**cd /usr/local/nagios/etc/**



The screenshot shows a terminal window titled "UBUNTU 20.04 [Running] - Oracle VM VirtualBox". The terminal prompt is "root@bhasker: ~#". The user has entered the command "cd /usr/local/nagios/etc/" and the prompt has changed to "root@bhasker: /usr/local/nagios/etc#". The terminal window has a dark purple background and a sidebar on the left with various application icons. The top of the window shows the menu bar with "File", "Machine", "View", "Input", "Devices", and "Help". The status bar at the bottom shows the date and time "Jul 5 21:50" and a "Right Ctrl" indicator.

49. List the files under **etc** directory using command:

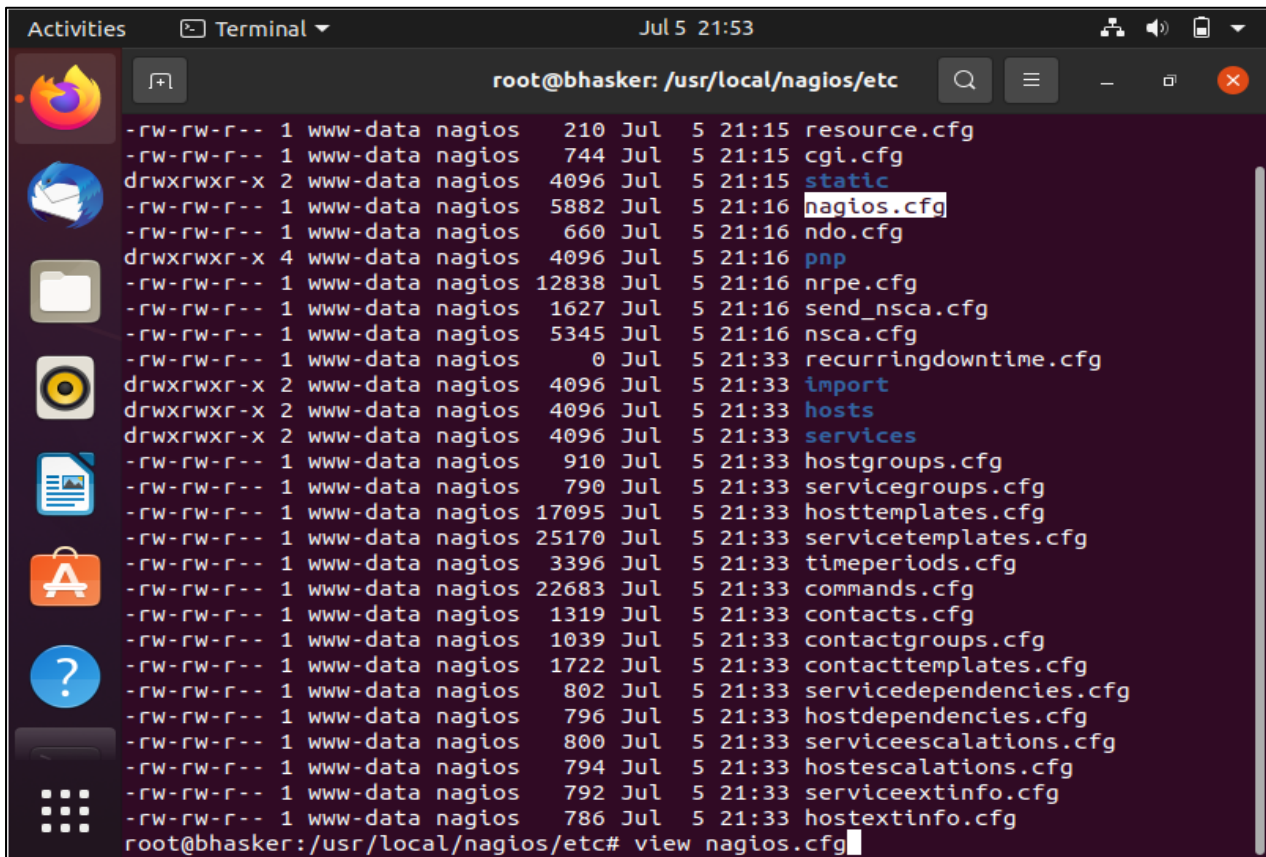
**ls -ltr**



The screenshot shows a terminal window titled "UBUNTU 20.04 [Running] - Oracle VM VirtualBox". The terminal prompt is "root@bhasker: /usr/local/nagios/etc#". The user has entered the command "ls -ltr" and the prompt has changed to "root@bhasker: /usr/local/nagios/etc#". The terminal window has a dark purple background and a sidebar on the left with various application icons. The top of the window shows the menu bar with "File", "Machine", "View", "Input", "Devices", and "Help". The status bar at the bottom shows the date and time "Jul 5 21:50" and a "Right Ctrl" indicator.

50. Now you can see **nagios.cfg** file created successfully. To view the configuration inside **nagios.cfg** file use command:

**view nagios.cfg**

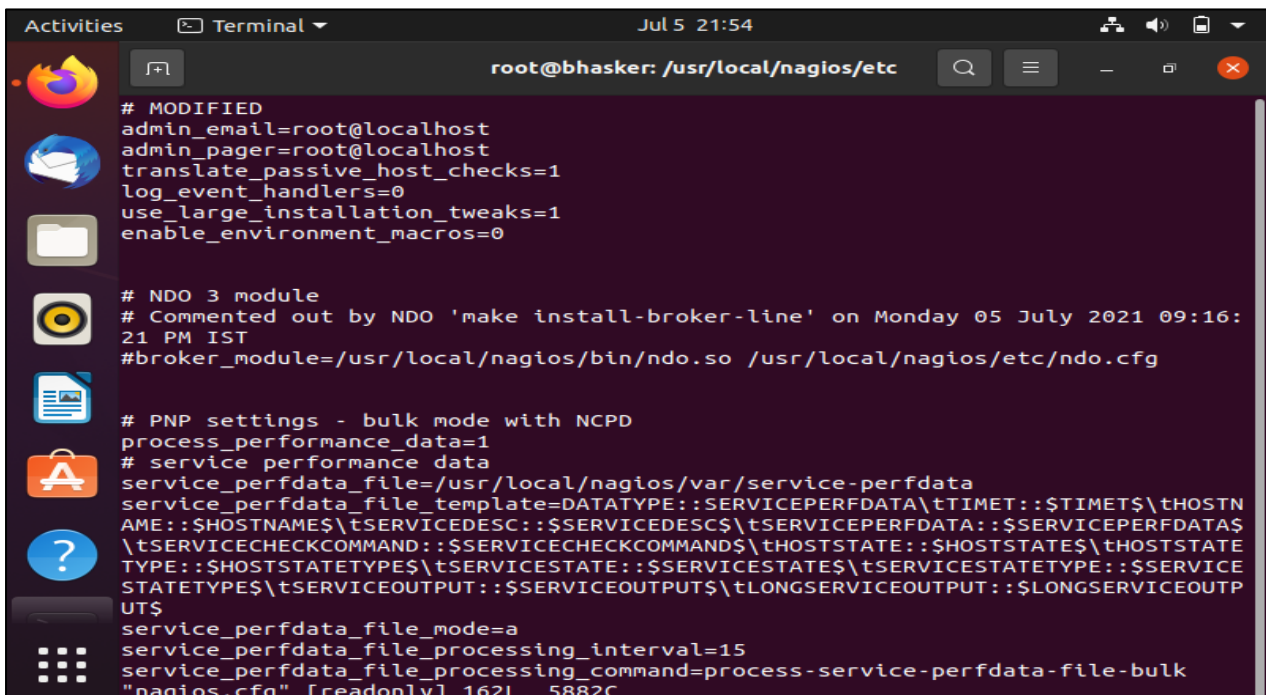


```

root@bhasker: /usr/local/nagios/etc
-rw-rw-r-- 1 www-data nagios 210 Jul 5 21:15 resource.cfg
-rw-rw-r-- 1 www-data nagios 744 Jul 5 21:15 cgi.cfg
drwxrwxr-x 2 www-data nagios 4096 Jul 5 21:15 static
-rw-rw-r-- 1 www-data nagios 5882 Jul 5 21:16 nagios.cfg
-rw-rw-r-- 1 www-data nagios 660 Jul 5 21:16 ndo.cfg
drwxrwxr-x 4 www-data nagios 4096 Jul 5 21:16 pnp
-rw-rw-r-- 1 www-data nagios 12838 Jul 5 21:16 nrpe.cfg
-rw-rw-r-- 1 www-data nagios 1627 Jul 5 21:16 send_nsca.cfg
-rw-rw-r-- 1 www-data nagios 5345 Jul 5 21:16 nsca.cfg
-rw-rw-r-- 1 www-data nagios 0 Jul 5 21:33 recurringdowntime.cfg
drwxrwxr-x 2 www-data nagios 4096 Jul 5 21:33 import
drwxrwxr-x 2 www-data nagios 4096 Jul 5 21:33 hosts
drwxrwxr-x 2 www-data nagios 4096 Jul 5 21:33 services
-rw-rw-r-- 1 www-data nagios 910 Jul 5 21:33 hostgroups.cfg
-rw-rw-r-- 1 www-data nagios 790 Jul 5 21:33 servicegroups.cfg
-rw-rw-r-- 1 www-data nagios 17095 Jul 5 21:33 hosttemplates.cfg
-rw-rw-r-- 1 www-data nagios 25170 Jul 5 21:33 servicetemplates.cfg
-rw-rw-r-- 1 www-data nagios 3396 Jul 5 21:33 timeperiods.cfg
-rw-rw-r-- 1 www-data nagios 22683 Jul 5 21:33 commands.cfg
-rw-rw-r-- 1 www-data nagios 1319 Jul 5 21:33 contacts.cfg
-rw-rw-r-- 1 www-data nagios 1039 Jul 5 21:33 contactgroups.cfg
-rw-rw-r-- 1 www-data nagios 1722 Jul 5 21:33 contacttemplates.cfg
-rw-rw-r-- 1 www-data nagios 802 Jul 5 21:33 servicedependencies.cfg
-rw-rw-r-- 1 www-data nagios 796 Jul 5 21:33 hostdependencies.cfg
-rw-rw-r-- 1 www-data nagios 800 Jul 5 21:33 serviceescalations.cfg
-rw-rw-r-- 1 www-data nagios 794 Jul 5 21:33 hostescalations.cfg
-rw-rw-r-- 1 www-data nagios 792 Jul 5 21:33 serviceextinfo.cfg
-rw-rw-r-- 1 www-data nagios 786 Jul 5 21:33 hostextinfo.cfg
root@bhasker: /usr/local/nagios/etc# view nagios.cfg

```

51. You can see the **configuration** inside **nagios.cfg** file as shown below in the screenshot.



```

root@bhasker: /usr/local/nagios/etc
# MODIFIED
admin_email=root@localhost
admin_pager=root@localhost
translate_passive_host_checks=1
log_event_handlers=0
use_large_installation_tweaks=1
enable_environment_macros=0

# NDO 3 module
# Commented out by NDO 'make install-broker-line' on Monday 05 July 2021 09:16:
21 PM IST
#broker_module=/usr/local/nagios/bin/ndo.so /usr/local/nagios/etc/ndo.cfg

# PNP settings - bulk mode with NCPD
process_performance_data=1
# service performance data
service_perfddata_file=/usr/local/nagios/var/service-perfddata
service_perfddata_file_template=DATATYPE::SERVICEPERFDATA\tTIMET::$TIMET$\tHOSTN
AME::$HOSTNAME$\tSERVICEDESC::$SERVICEDESC$\tSERVICEPERFDATA::$SERVICEPERFDATA$
\tSERVICECHECKCOMMAND::$SERVICECHECKCOMMAND$\tHOSTSTATE::$HOSTSTATE$\tHOSTSTATE
TYPE::$HOSTSTATETYPE$\tSERVICESTATE::$SERVICESTATE$\tSERVICESTATETYPE::$SERVICE
STATETYPE$\tSERVICEOUTPUT::$SERVICEOUTPUT$\tLONGSERVICEOUTPUT::$LONGSERVICEOUTP
UT$
service_perfddata_file_mode=a
service_perfddata_file_processing_interval=15
service_perfddata_file_processing_command=process-service-perfddata-file-bulk
"nagios.cfg" [readonly] 162L, 5882C

```