OPERATING SYSTEM INSTALLATION (VIRTUAL MACHINES) REPORT

Course: Operating Systems

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Index number: **8262019**

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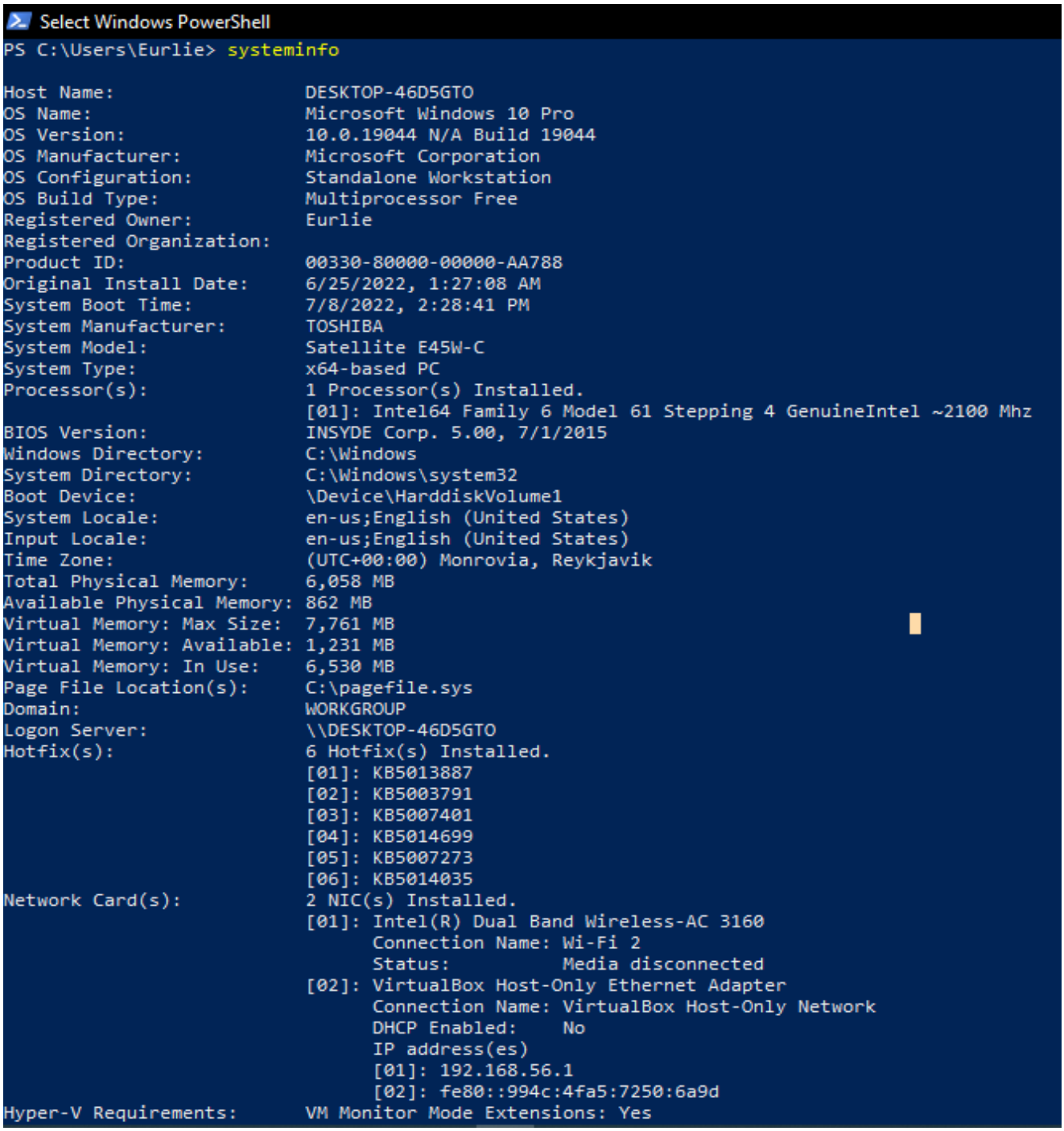
System Information

Name of my laptop: **Toshiba Satellite E45W – C**

Operating System: **Windows 10 Pro**

Computer Physical Resources

CPU: **Intel64 family 2.10 GHz** RAM: **6 GB** DISK Storage: **256 GB**



Description

My laptop runs the Microsoft Windows 10 Pro operating system which I originally installed on 25th June 2022 01:27 am.

I made my system a dual boot operating system i.e. I run two different operating systems on my laptop, Windows 10 Pro and Ubuntu 22.04 LTS.

Details:

Operating Systems	**Disk Storage Capacity**
Windows 10 Pro	200 GB
Ubuntu 22.04 LTS	56 GB

With the dual boot operating system, the two operating systems have access to the entire memory (in my case, 6 GB) however, Windows 10 Pro has access to 200 GB of the Disk Storage with NTFS file system and Ubuntu 22.04 LTS has access to only 56 GB of the Disk Storage with ext4 Journals file system.

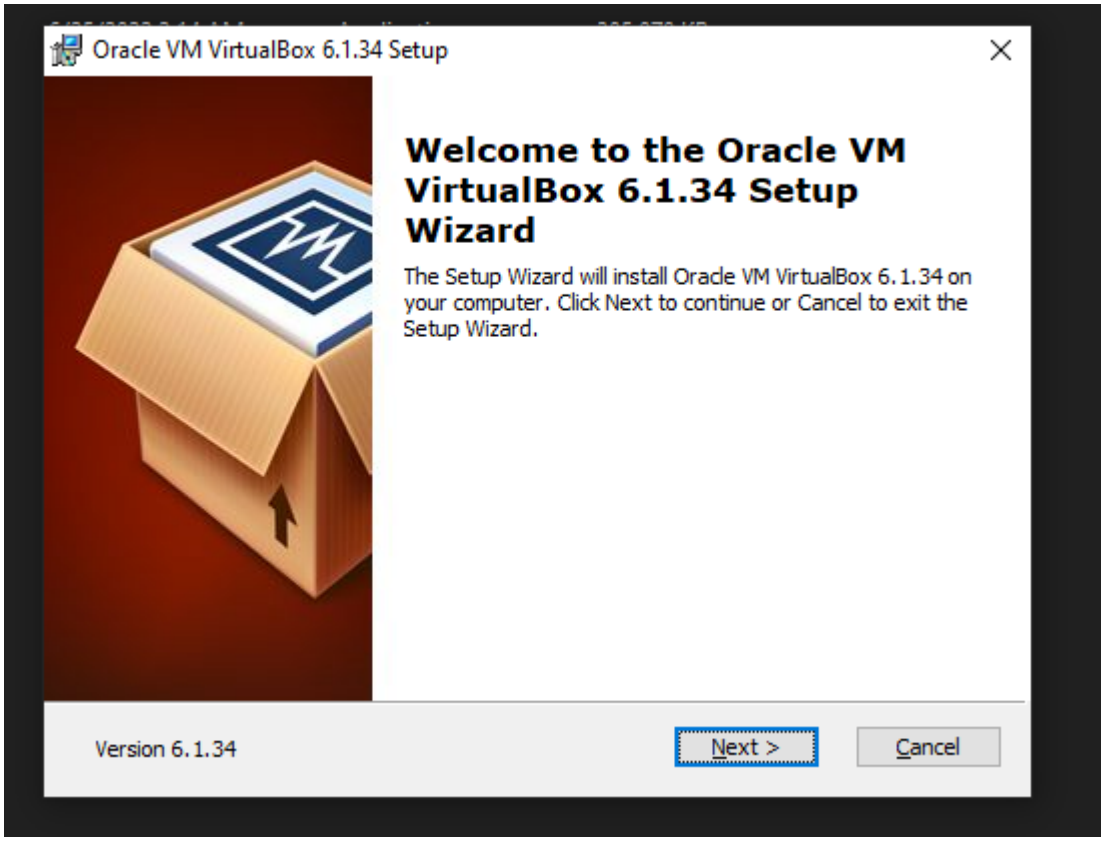
Any other system resource is available to each operating system.

One disadvantage of the dual boot as compared to the Virtual Machine is, the two operating system cannot run concurrently.

Virtual Machines

Virtual Machine on Windows 10 Pro

I used **Oracle VirtualBox** to create two VMs. On these virtual machines, the system runs Windows 11 and Ubuntu Linux Distro.



I installed Oracle VirtualBox.

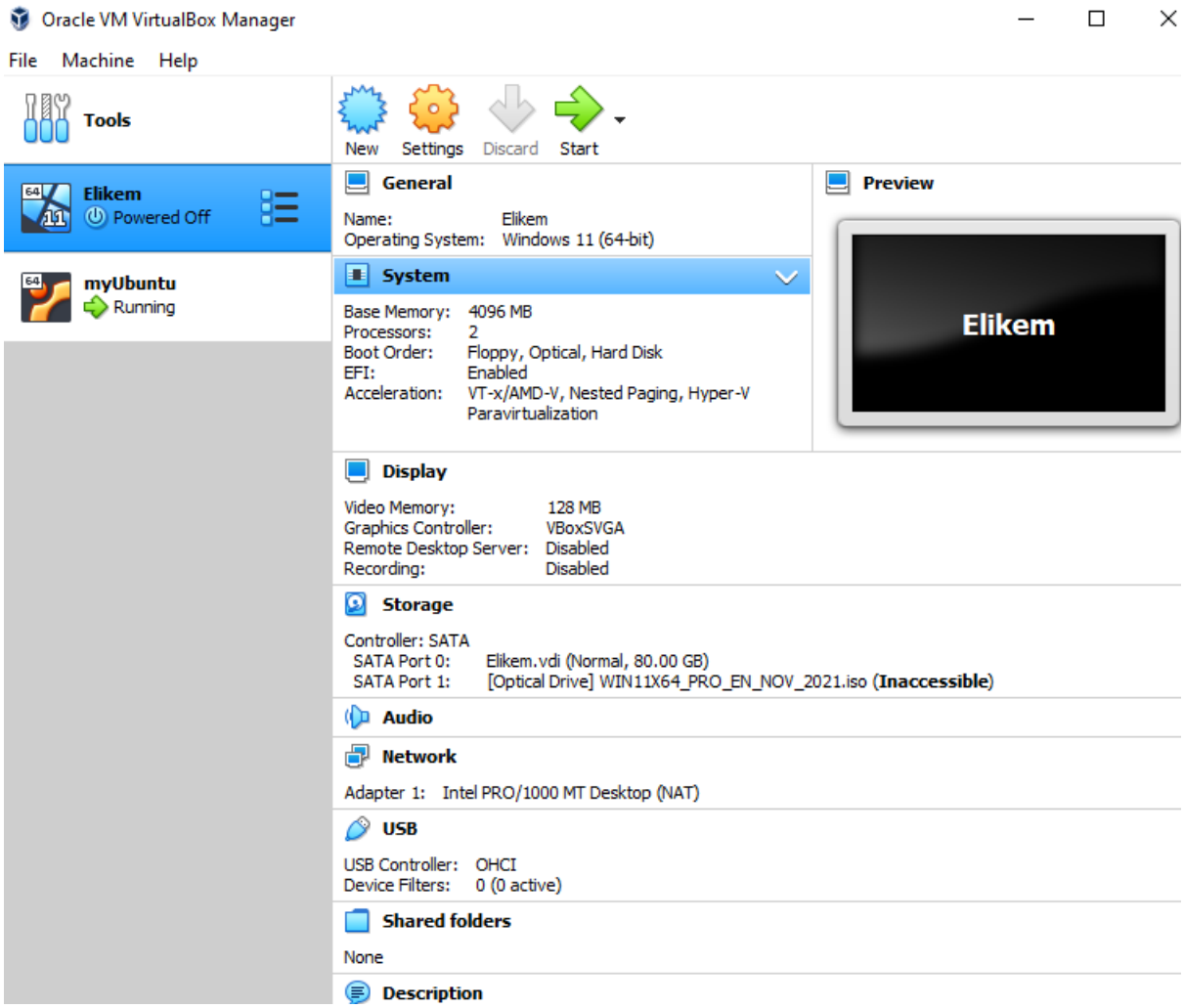
Windows 11 installation and resource allocation

Virtual Windows 11

Name of the machine: **Elikem**

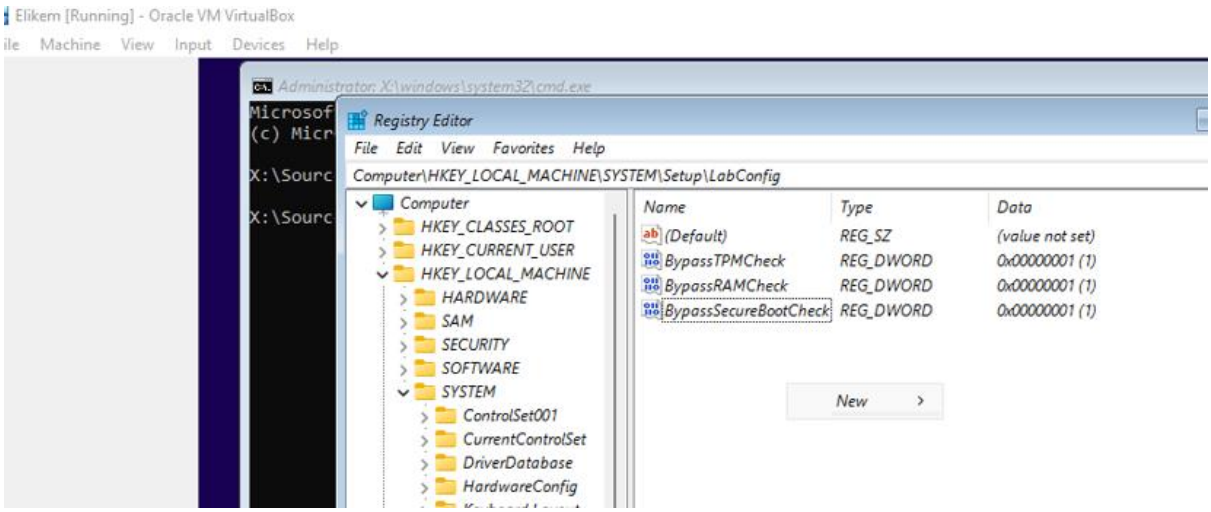
RAM size: **4096 MB**

Disk storage capacity: **80 GB**



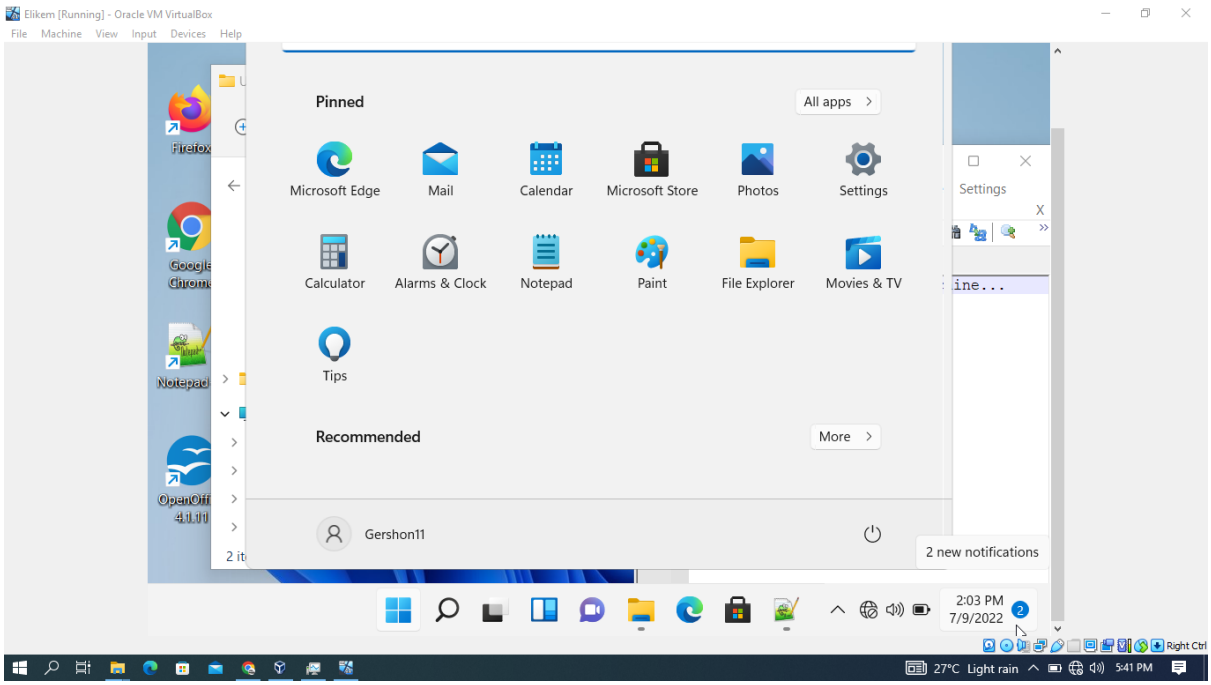
Windows 11 installation process

During the installation, my laptop doesn't meet **Windows 11 system requirements** so entered the system's registry and made changes in order to bypass the system requirement check



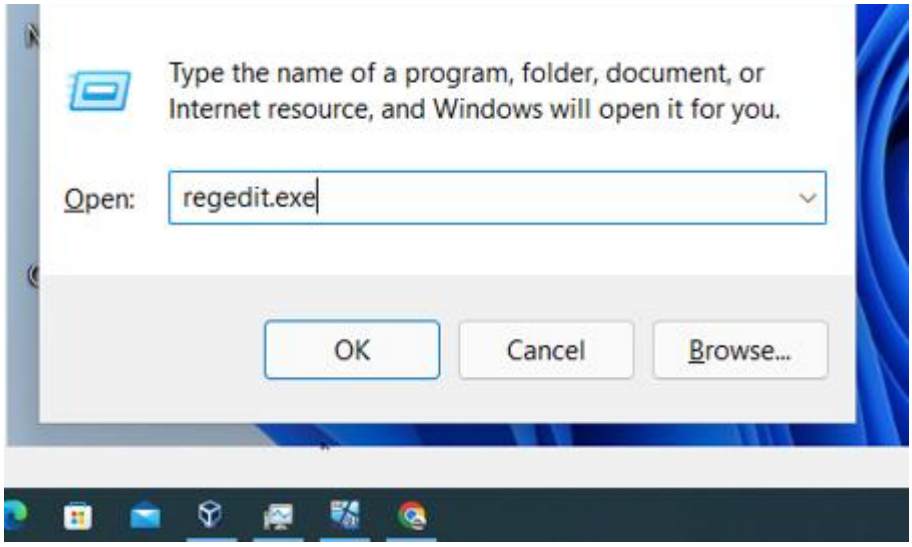
This figure shows the System registry editor and changes I made.

Welcome to the Windows 11 VM

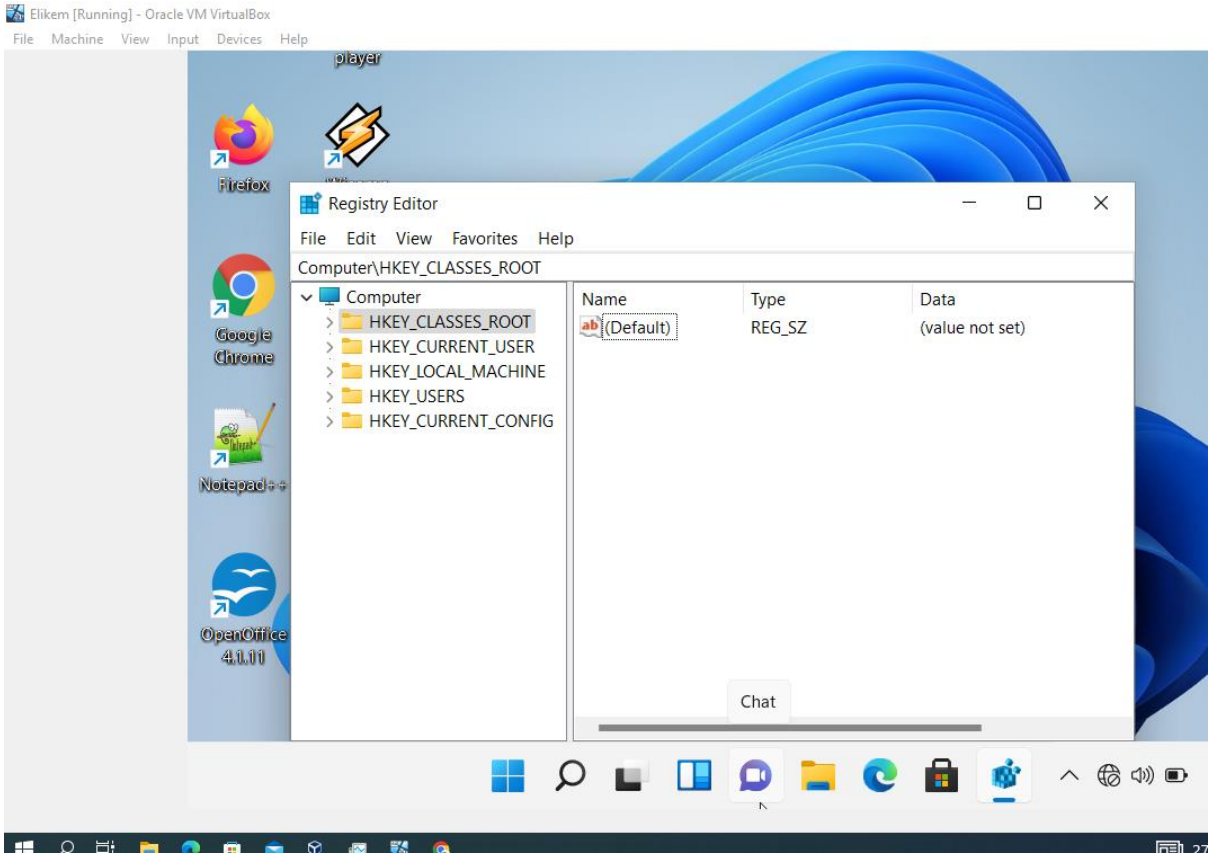


Registry editor on Windows 11.

Windows Key + R, type regedit.exe. And then press Enter.

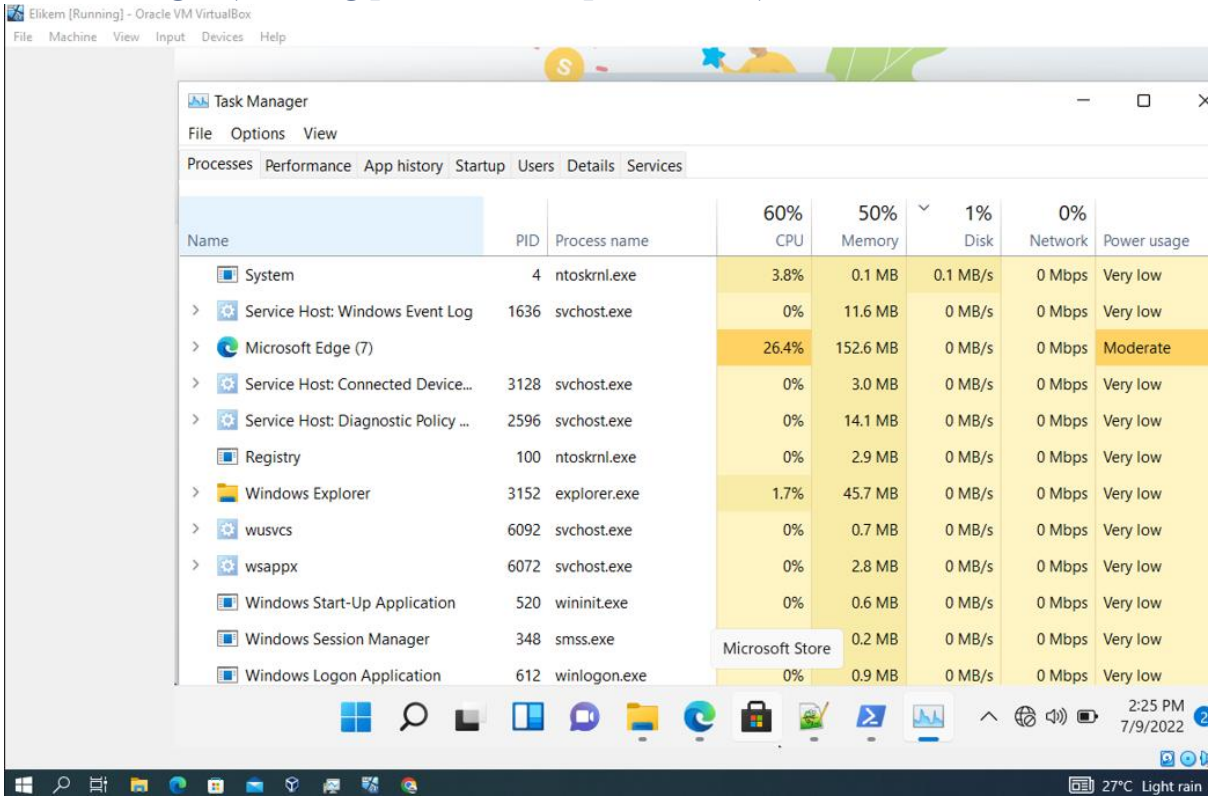


Here comes the Registry editor



This figure shows the registry editor of the Windows 11 Pro running in the VM

Task Manager (showing processes and process IDs)



The following figure shows Processes, Process IDs (PIDs) etc

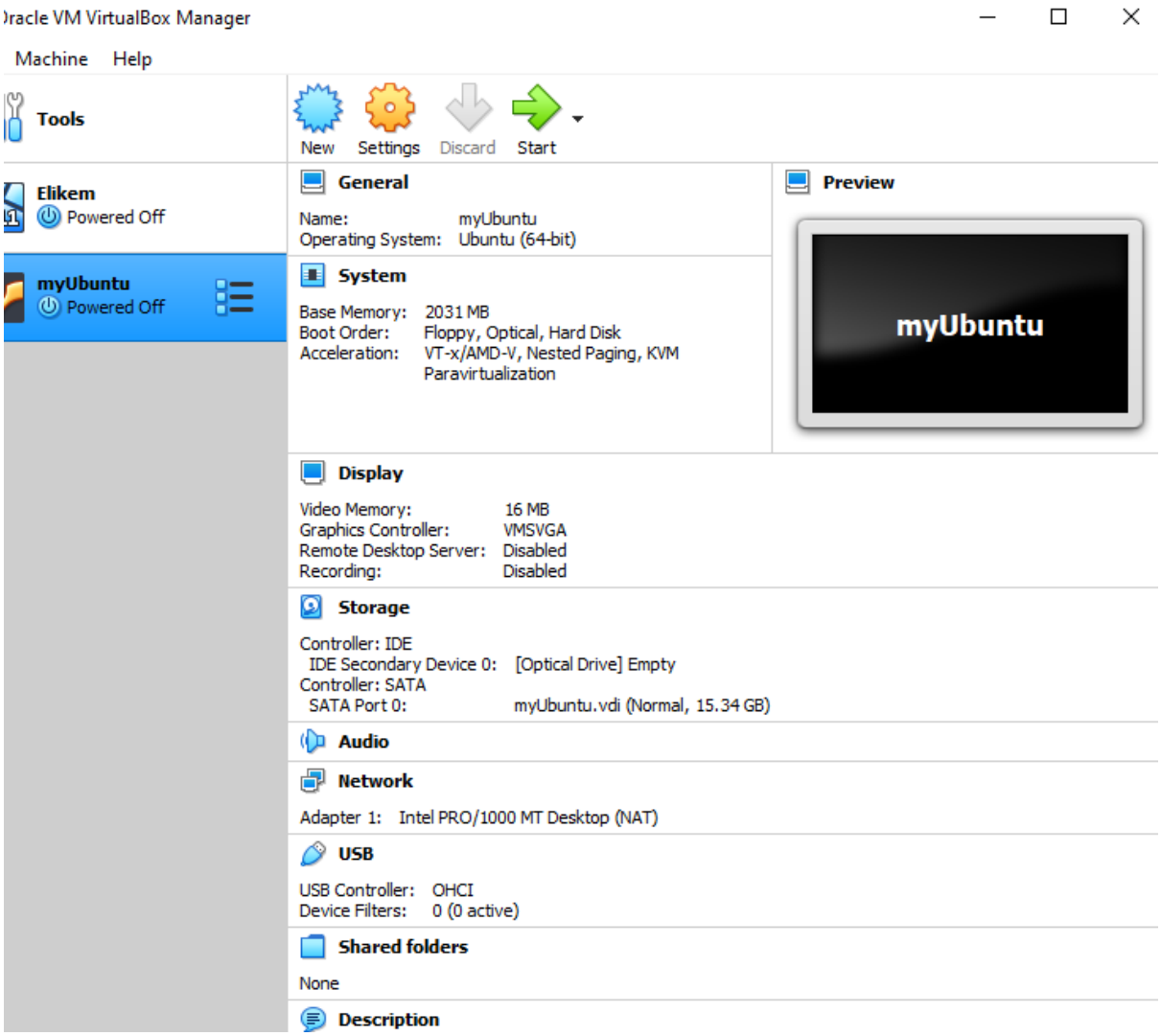
Ubuntu 22.04 LTS installation and resource allocation

Virtual Ubuntu 22.04 LTS

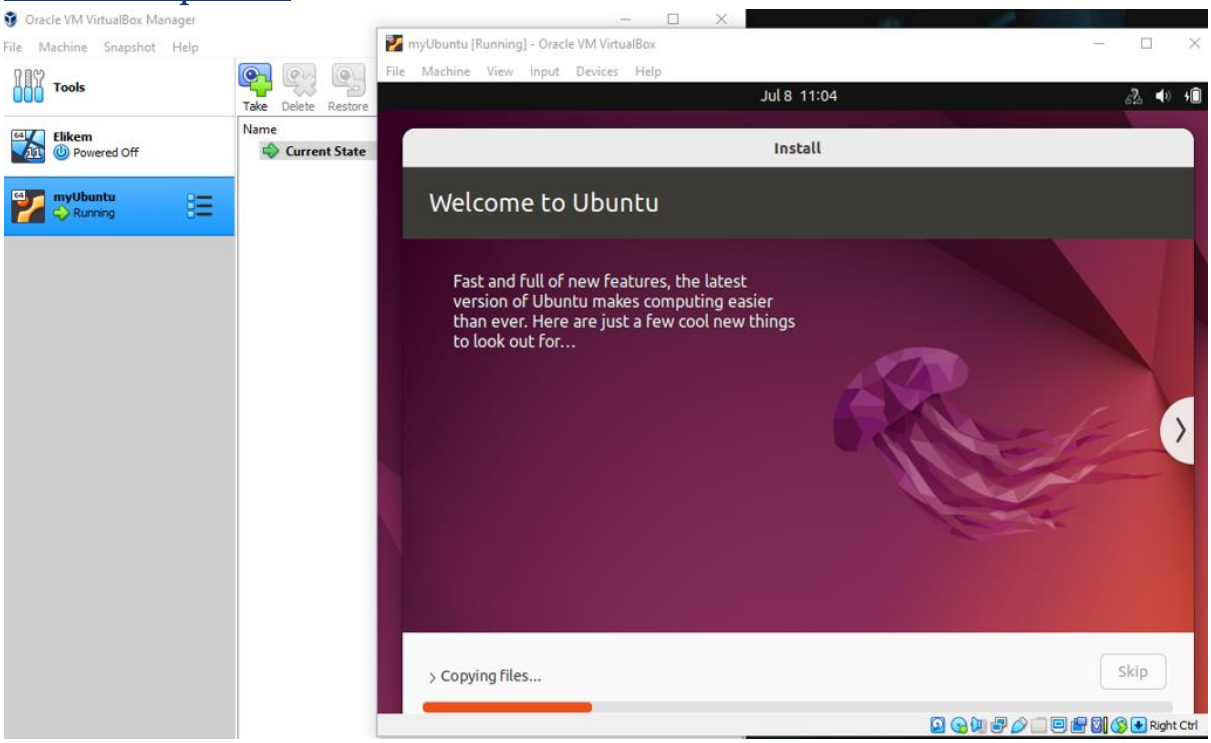
Name of the machine: **myUbuntu**

RAM size: **2031 MB**

Disk storage capacity: **15.34 GB**

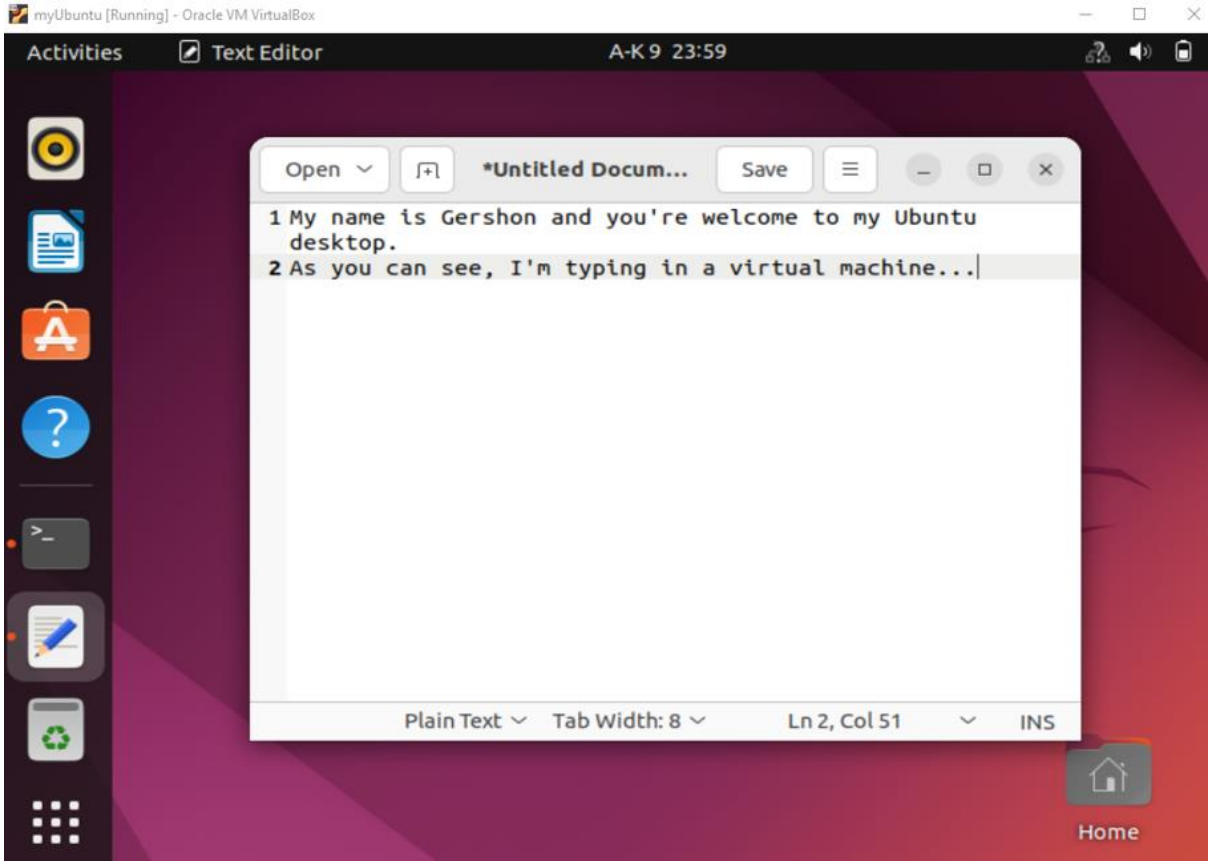


Installation process

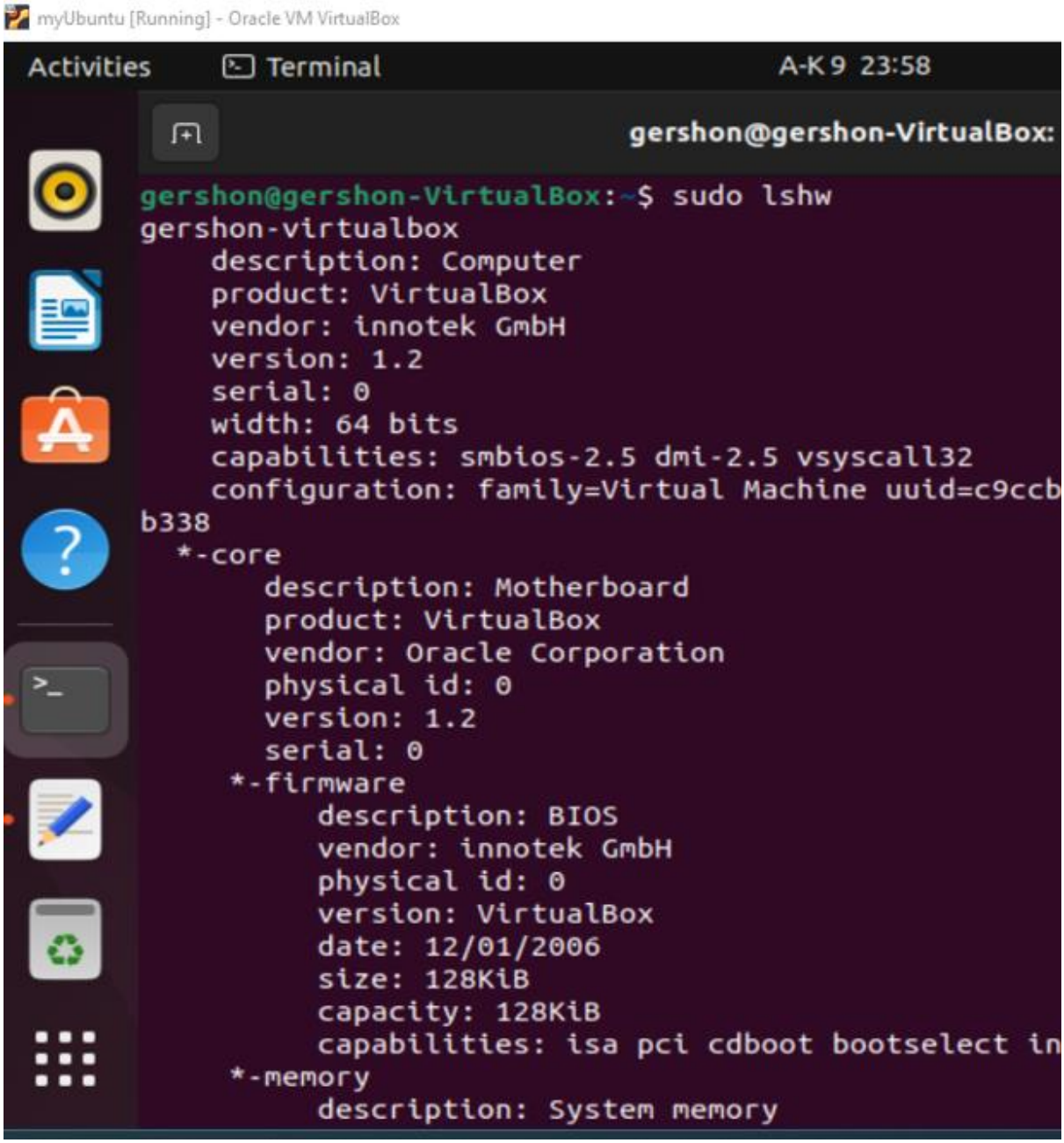


Ubuntu desktop view

The figure below shows the welcome screen of the Ubuntu page.

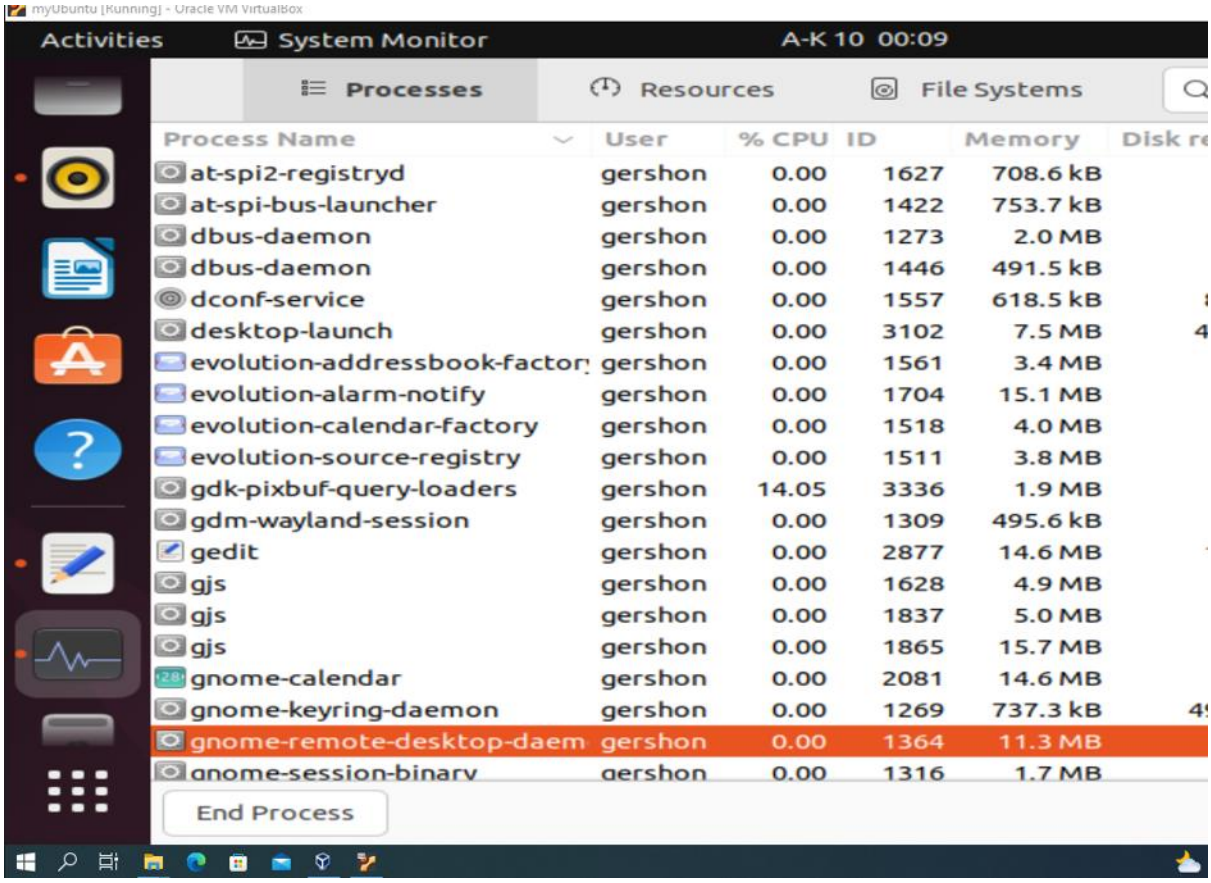


Ubuntu virtual machine System information



Ubuntu (System Monitor) Task Manager

This figure shows processes and process IDs in the ubuntu system monitor (task manager in Windows)



Ubuntu Registry

Registry in Ubuntu is called **"deconf-editor"**

Ubuntu, unlike Windows, does not have registry entries. Instead, is relying on text/flat files placed in the /etc/ directory for configuration and settings.

Equivalently, there's an editor called dconf-editor that needs to be installed and this could show all the registry file settings as shown below.