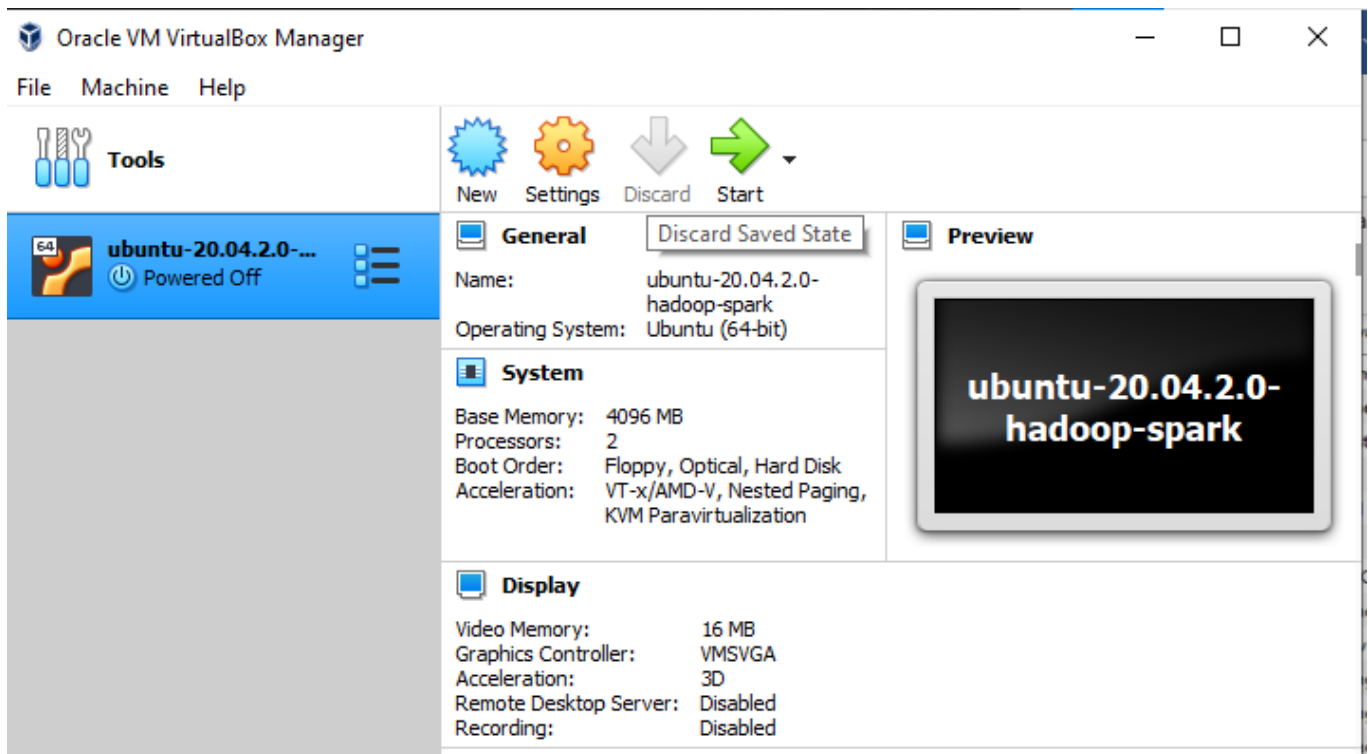


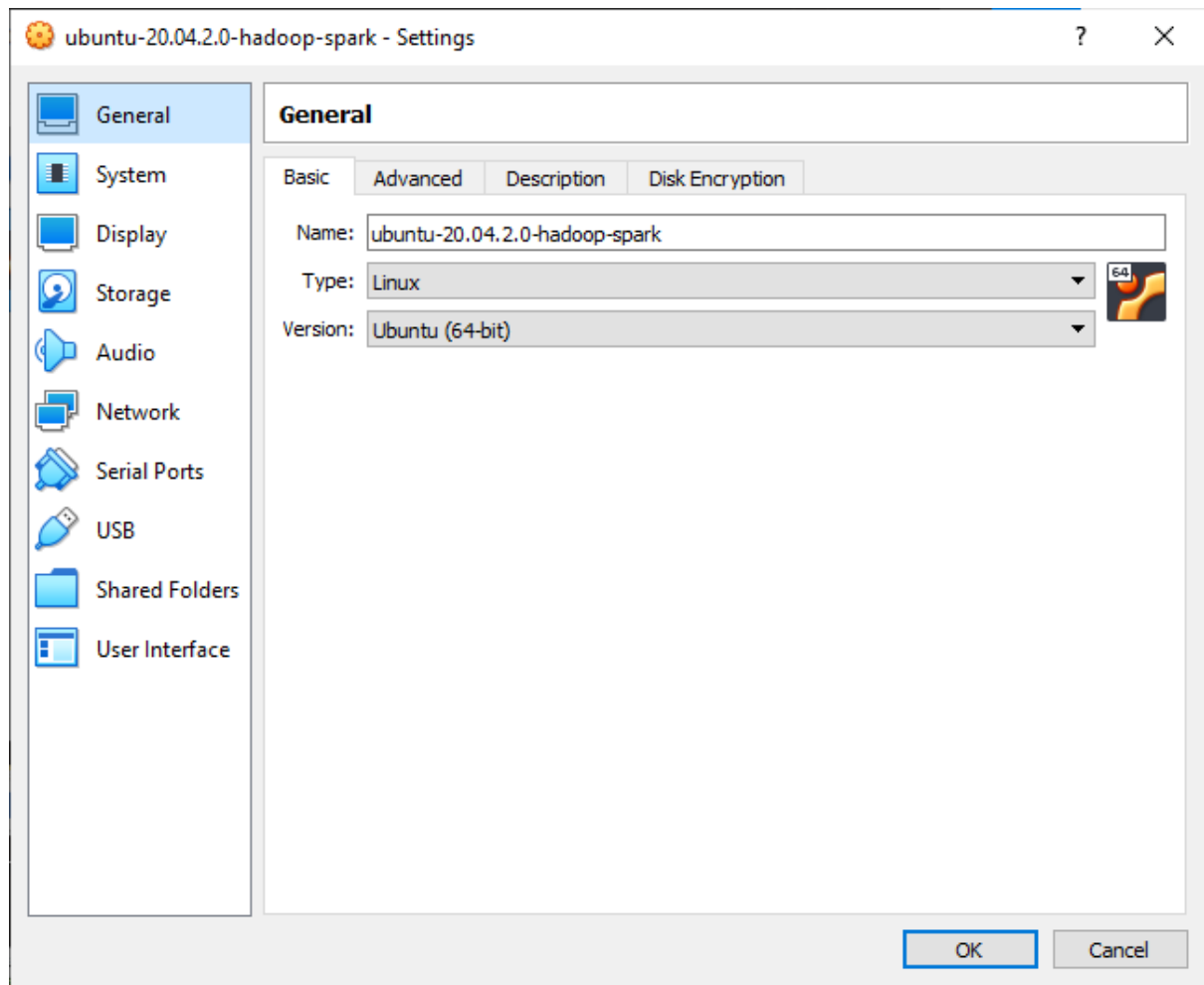
ITECH2302 Big Data Management

Speeding Up Virtualbox

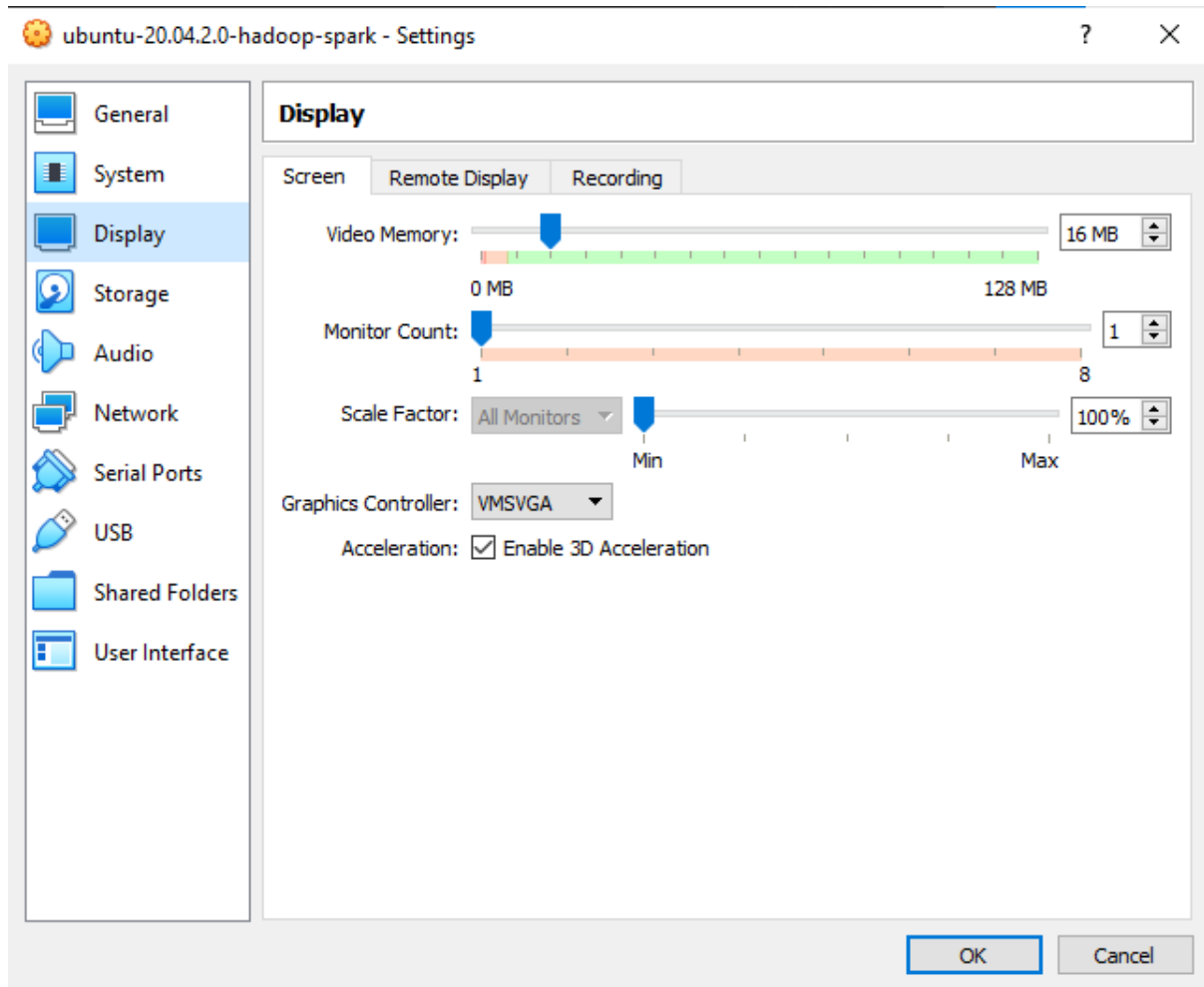
It is possible to configure VirtualBox 6.1 open-source virtualization software to make the Ubuntu virtual machine faster and smoother. the **latest VirtualBox 6.1 series** comes with improved 3D acceleration support for Linux VMs, which translates to better 3D performance on virtual machines, especially those running Ubuntu 20.04 LTS or Ubuntu 18.04 LTS.



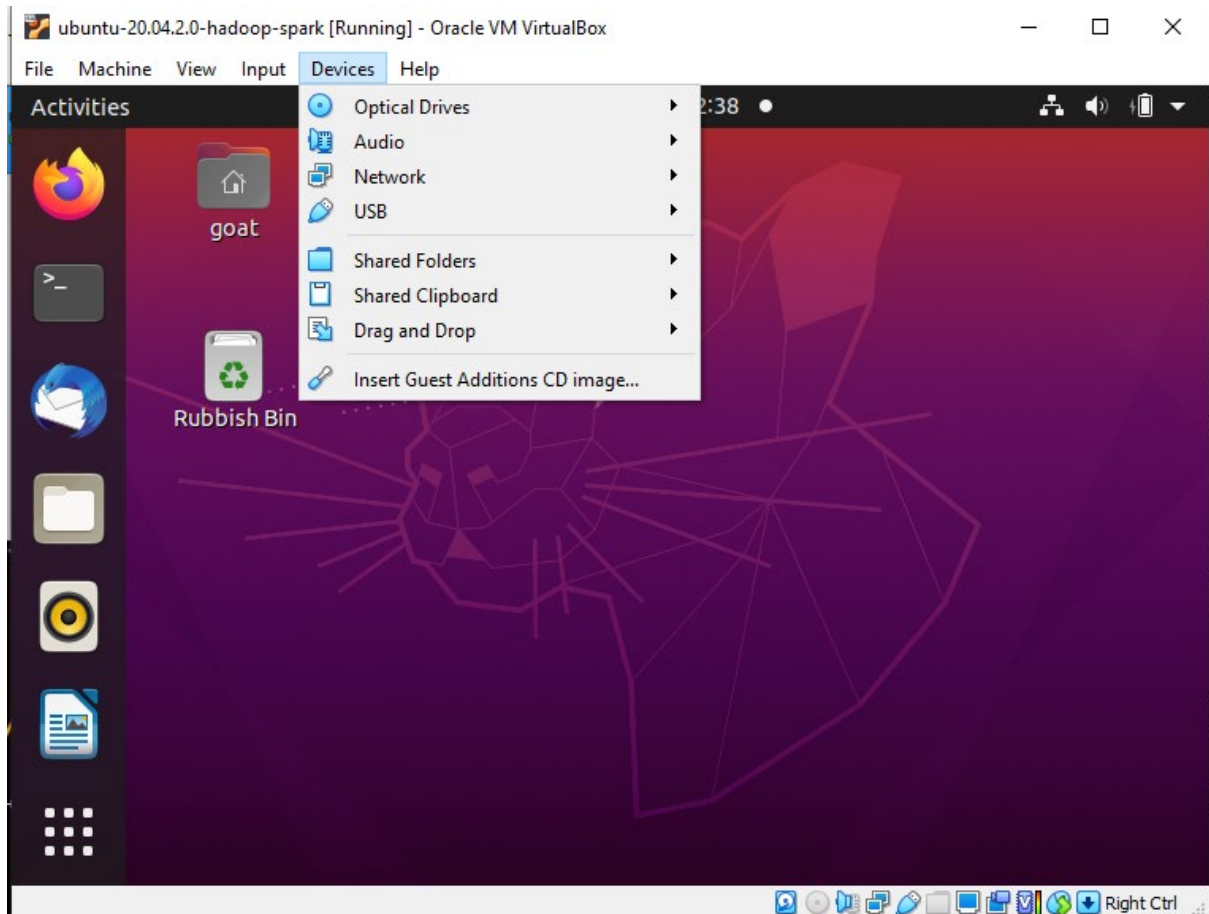
To correctly enable 3D acceleration on VirtualBox virtual machines running Ubuntu or other GNU/Linux distribution, go to Settings >



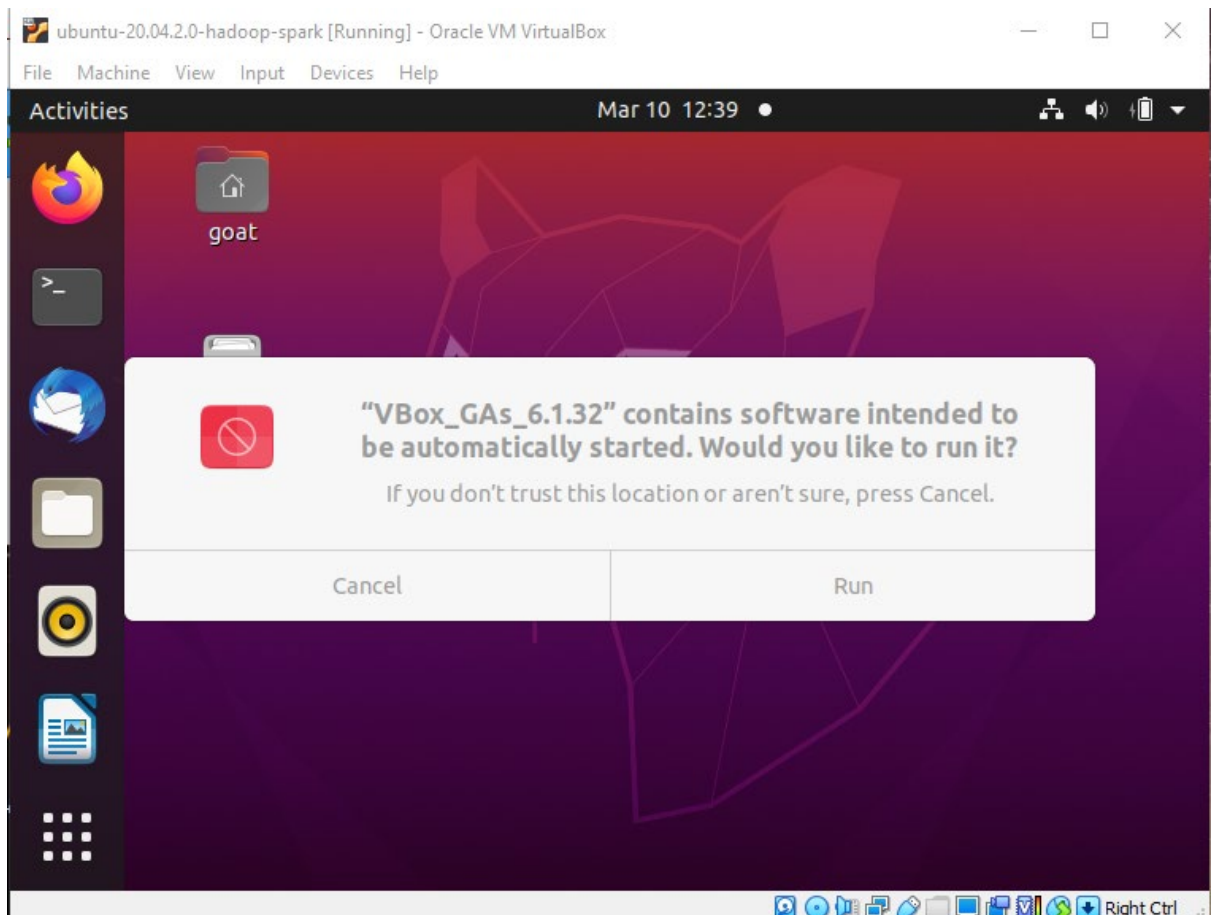
Display and select “**VMSVGA**” as the “**Graphic Controller**” and check the “Enable 3D Acceleration” box under Acceleration. Like this...

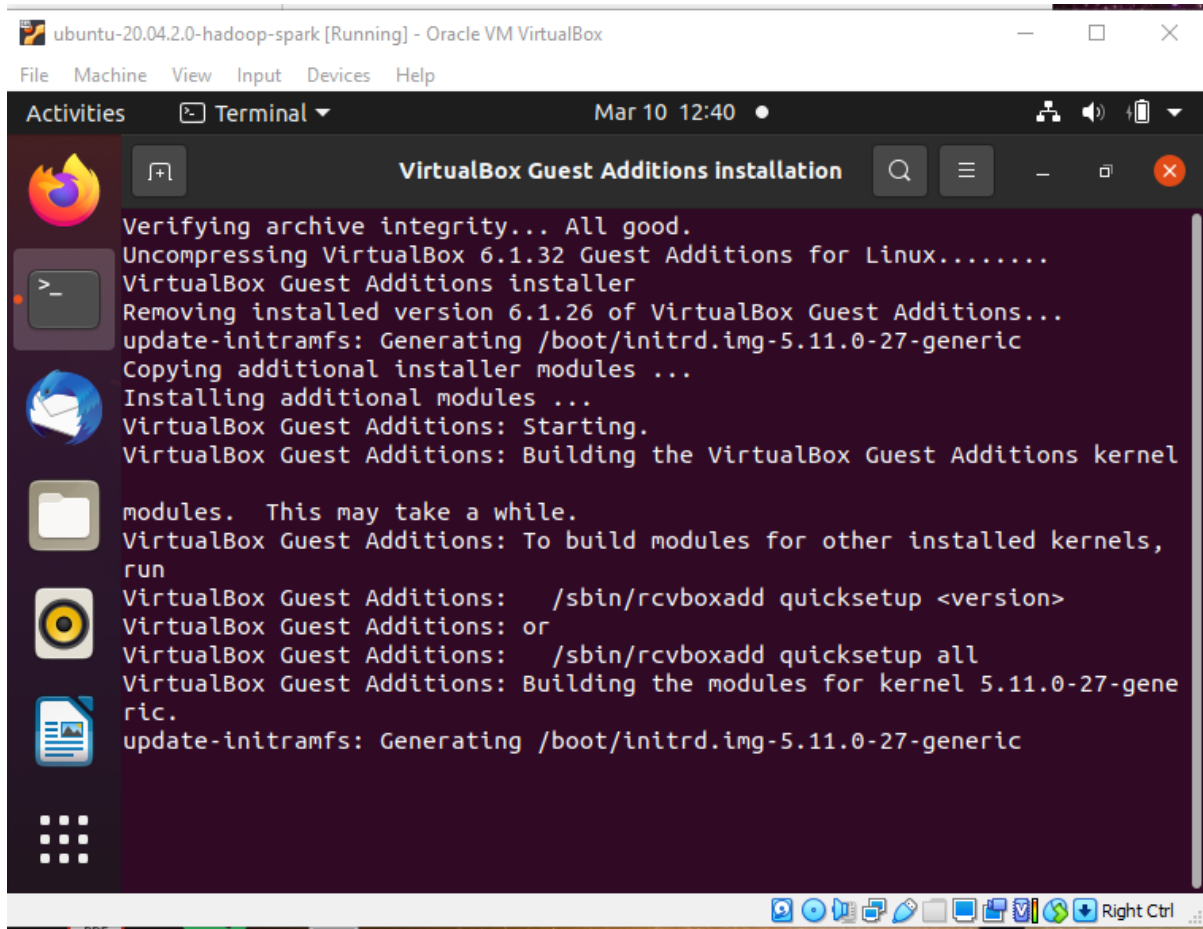


Then, power on your Ubuntu/Linux virtual machine and install the latest VirtualBox Guest Additions by going to the Devices menu and selecting the “Insert Guest Additions CD image” option.



You will be immediately prompted to install the VirtualBox Guest Additions kernel modules, so proceed with the installation and reboot your virtual machine when the process is over.





The screenshot shows a terminal window titled "VirtualBox Guest Additions installation" running inside an Ubuntu VM. The terminal output displays the following steps:

```
Verifying archive integrity... All good.
Uncompressing VirtualBox 6.1.32 Guest Additions for Linux.....
VirtualBox Guest Additions installer
Removing installed version 6.1.26 of VirtualBox Guest Additions...
update-initramfs: Generating /boot/initrd.img-5.11.0-27-generic
Copying additional installer modules ...
Installing additional modules ...
VirtualBox Guest Additions: Starting.
VirtualBox Guest Additions: Building the VirtualBox Guest Additions kernel
modules. This may take a while.
VirtualBox Guest Additions: To build modules for other installed kernels,
run
VirtualBox Guest Additions: /sbin/rcvboxadd quicksetup <version>
VirtualBox Guest Additions: or
VirtualBox Guest Additions: /sbin/rcvboxadd quicksetup all
VirtualBox Guest Additions: Building the modules for kernel 5.11.0-27-gene
ric.
update-initramfs: Generating /boot/initrd.img-5.11.0-27-generic
```

The terminal window is part of a larger interface showing the Ubuntu desktop environment within the VirtualBox VM. The top bar indicates the VM is running and the date is Mar 10 12:40. The bottom of the window shows a standard Linux desktop with various application icons and a taskbar.

That's it! Your Linux VM should now be faster and smoother.