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Instructor: Engr. Roman Richard	Semester and SY: 1st sem 2023-2024

Activity 8: Install, Configure, and Manage Availability Monitoring tools

1. Objectives

Create and design a workflow that installs, configure and manage enterprise monitoring tools using Ansible as an Infrastructure as Code (IaC) tool.

2. Discussion

Availability monitoring is a type of monitoring tool that we use if the certain workload is up or reachable on our end. Site downtime can lead to loss of revenue, reputational damage and severe distress. Availability monitoring prevents adverse situations by checking the uptime of infrastructure components such as servers and apps and notifying the webmaster of problems before they impact on business.

3. Tasks

1. Create a playbook that installs Nagios in both Ubuntu and CentOS. Apply the concept of creating roles.
2. Describe how you did step 1. (Provide screenshots and explanations in your report. Make your report detailed such that it will look like a manual.)
3. Show an output of the installed Nagios for both Ubuntu and CentOS.
4. Make sure to create a new repository in GitHub for this activity.

4. Output (screenshots and explanations)

1. Create a playbook that installs Nagios in both Ubuntu and CentOS. Apply the concept of creating roles.
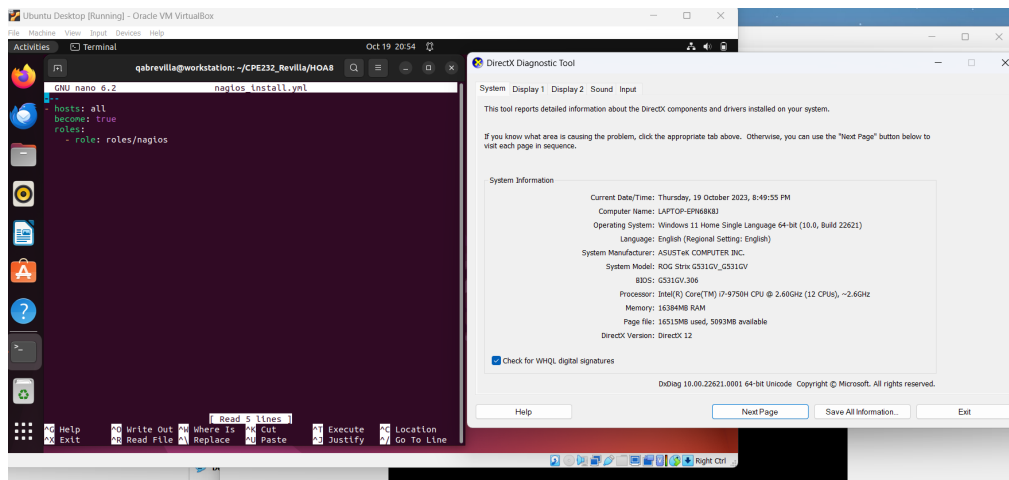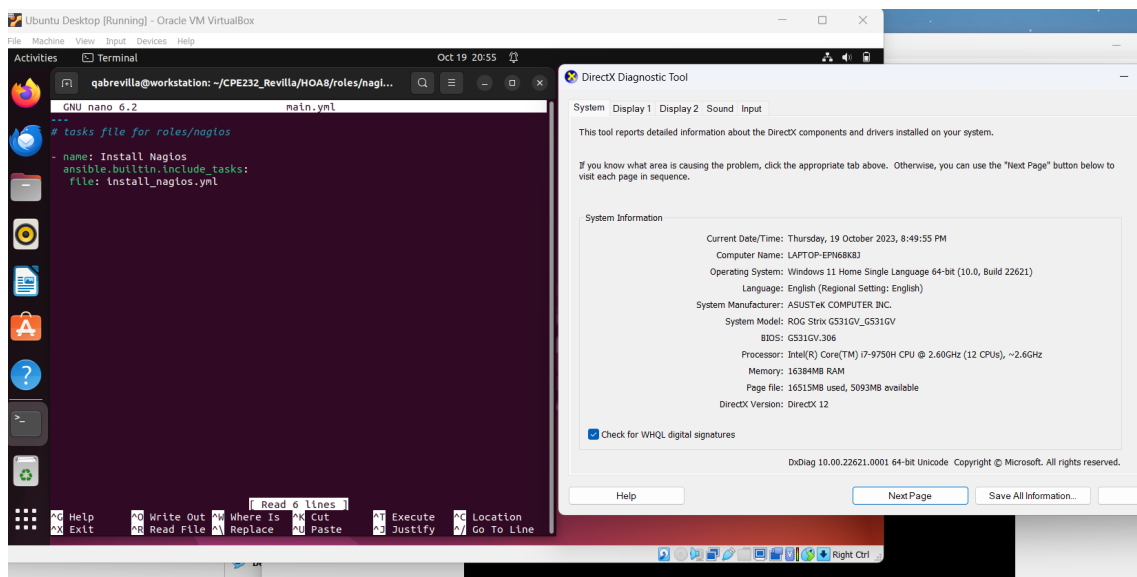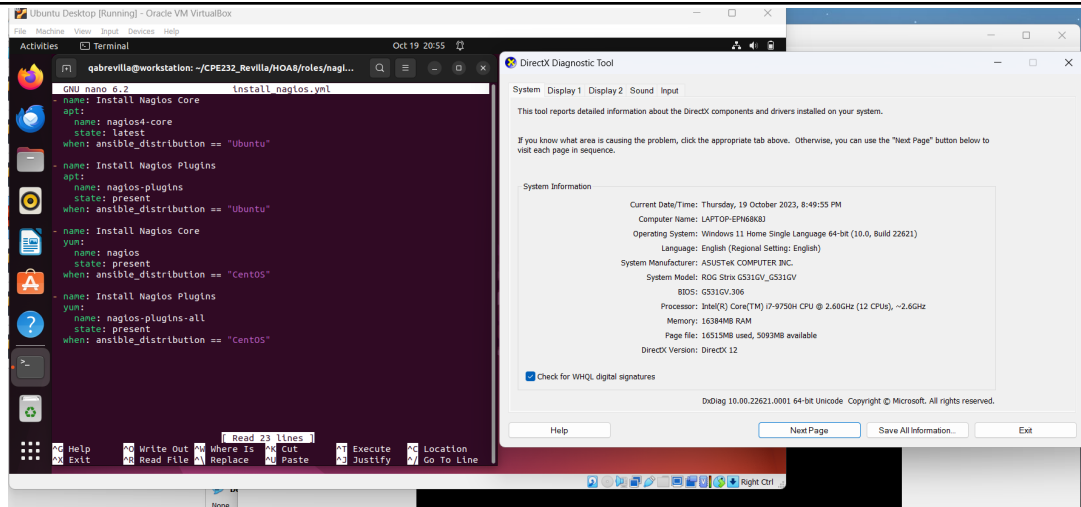
2. Describe how you did step 1. (Provide screenshots and explanations in your report. Make your report detailed such that it will look like a manual.)
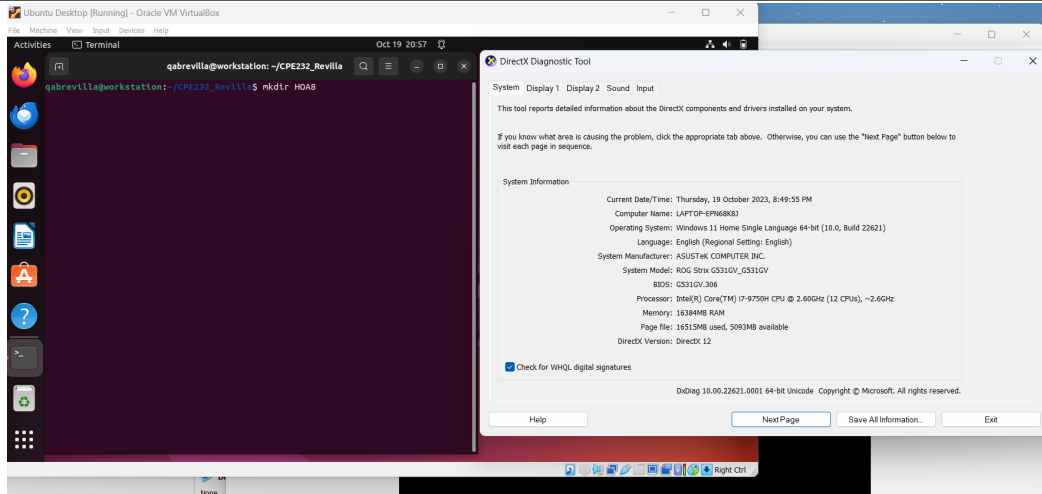
Figure 2.1 Directory for HOA 8

Creating another directory every activity is a way of organizing files before committing in the github repository
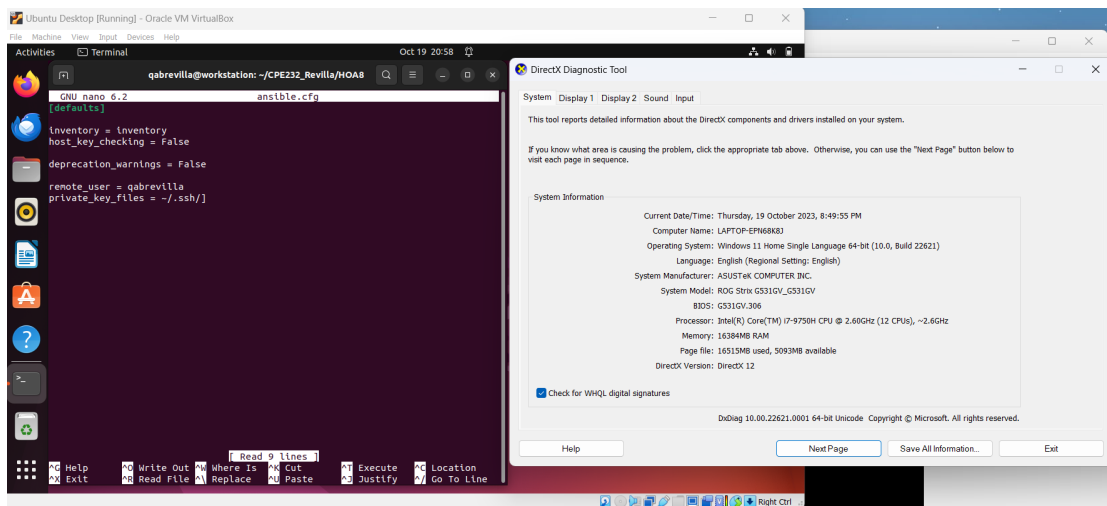

Figure 2.2 Creating a ansible.cfg

The command for ansible.cfg is the same as in the past activity. Ansible.cfg is the brain of your playbook, it has the function of how your ansible works.
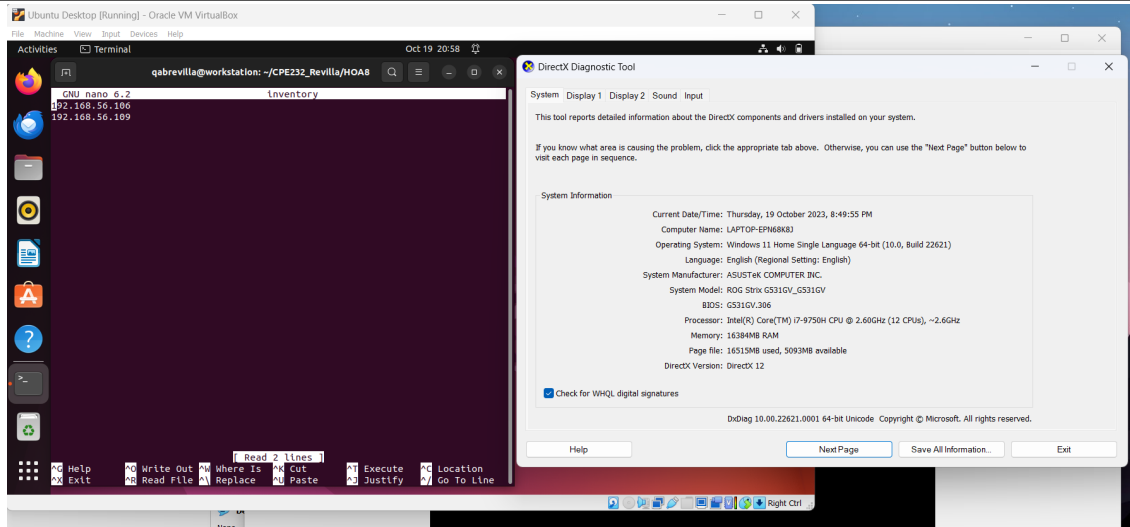
Figure 2.3 Setup inventory
Inventory keeps your remote server's ip addresses in order for the ansible
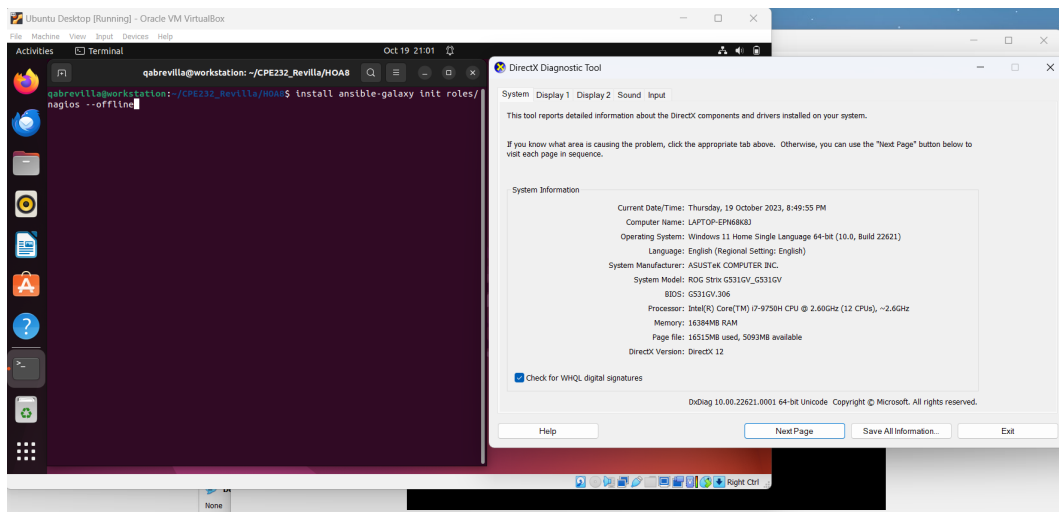playbook to read and connect to the remote servers.

Figure 2.4 Install ansible-galaxy init roles/nagios –offline
This command initializes an ansible directory and provides a proper directory
tree for installing nagios. It will create a directory with built-in directories for
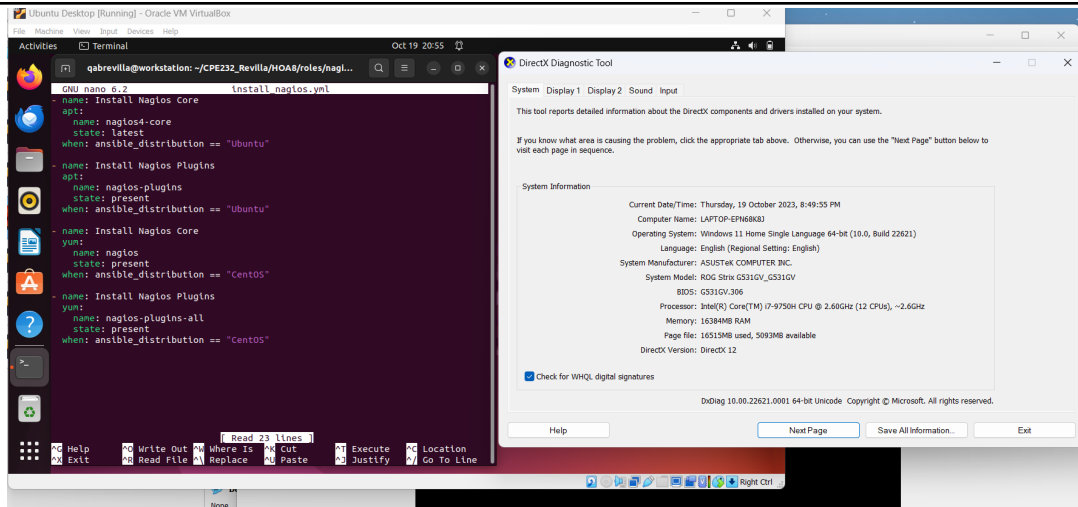better organization of roles.

Figure 2.5 install_nagios.yml

Create a install_nagios.yml containing a tasks that will install Nagios core and other plugins in order to install Nagios.
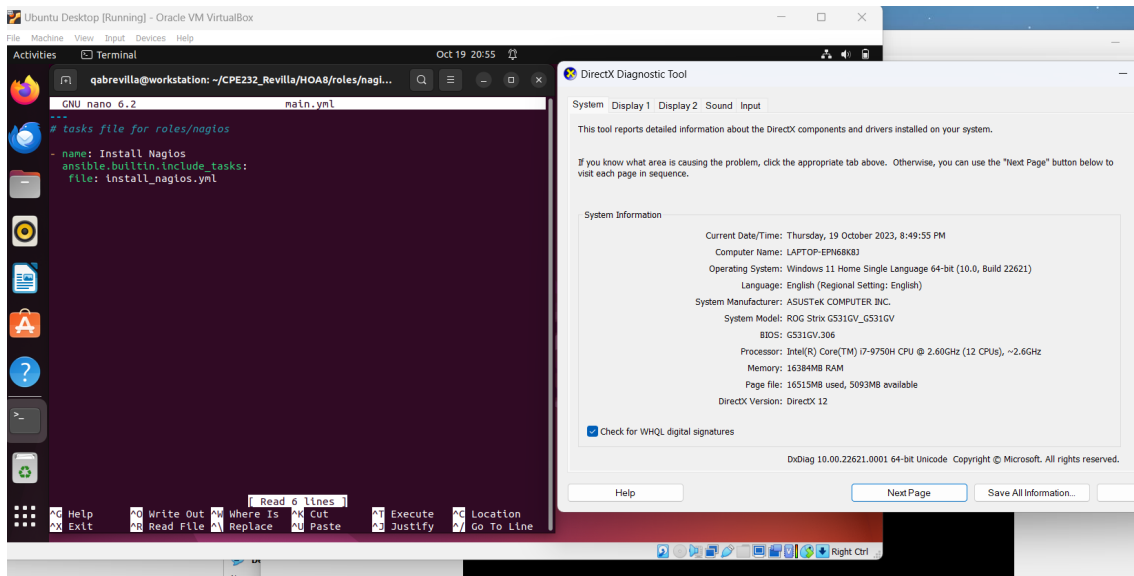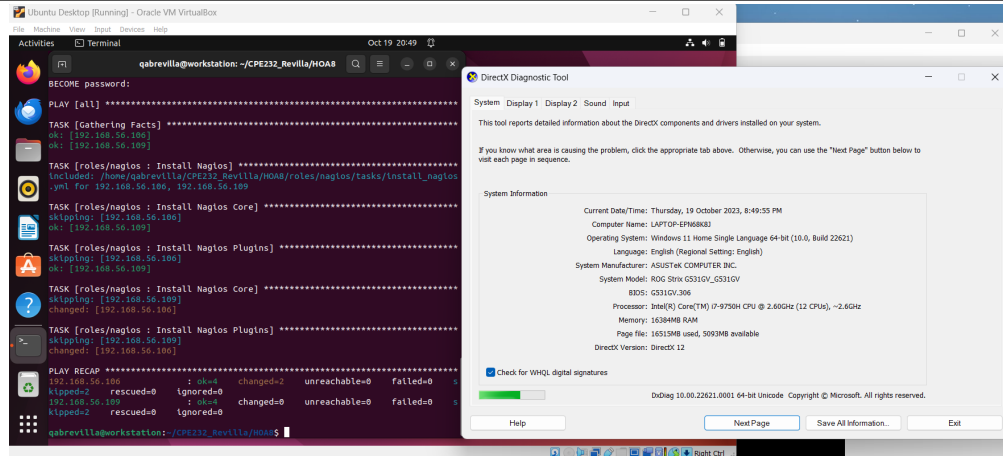

Figure 2.6 main.yml

Figure 2.7 Running install_nagios.yml

After running the playbook, it was able to install Nagios for both centos and ubuntu remote servers.

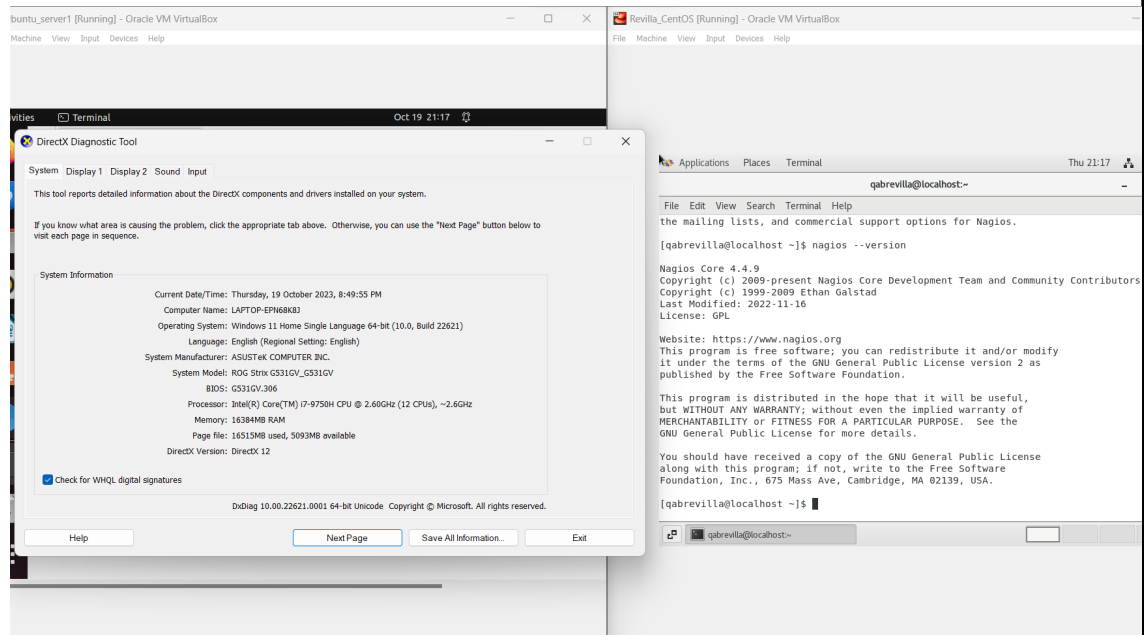3. Show an output of the installed Nagios for both Ubuntu and CentOS.
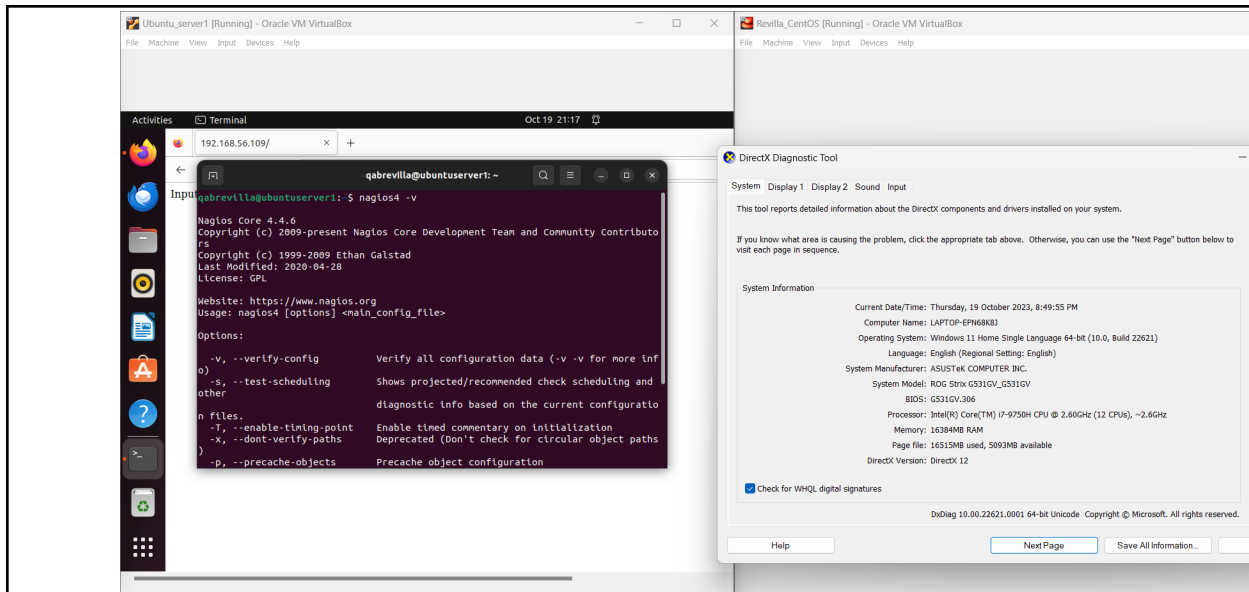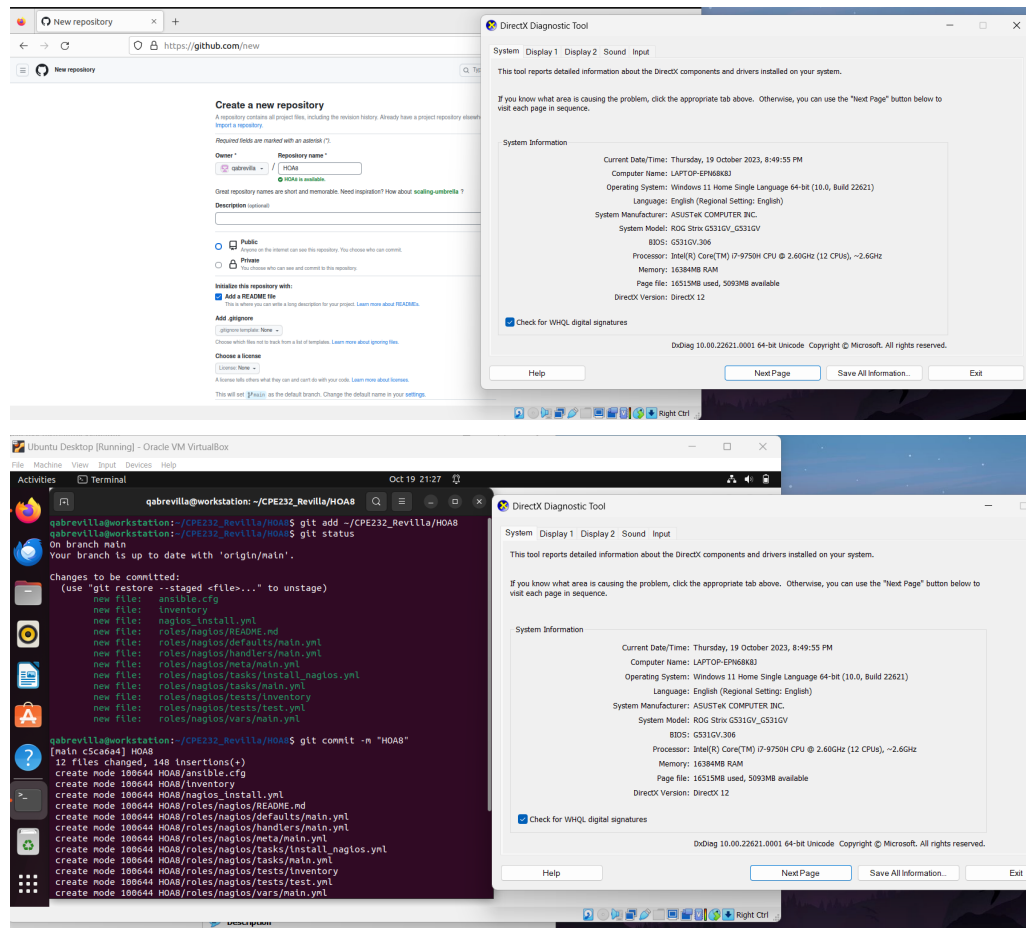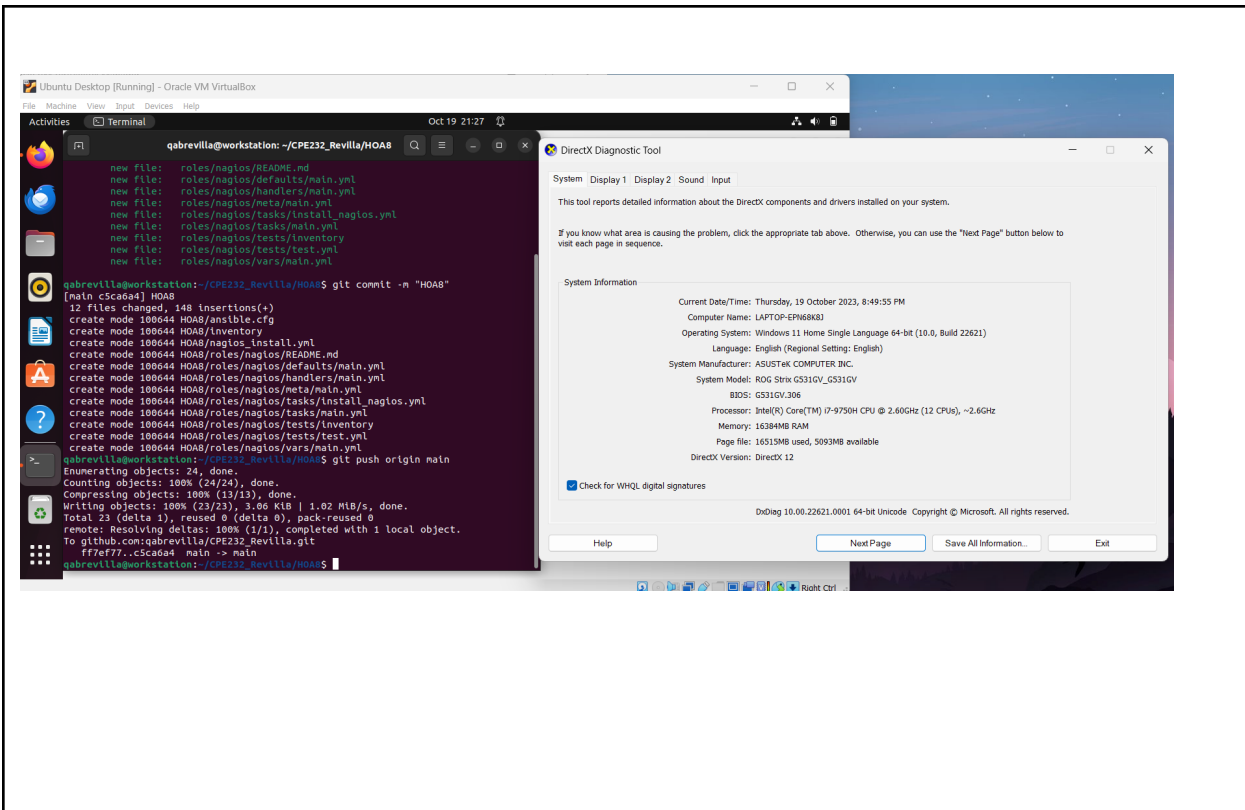

Figure 3.1 Output in Centos

Figure 3.2 Output in Ubuntu

4. Make sure to create a new repository in GitHub for this activity.

Reflections:

Answer the following:

1. What are the benefits of having an availability monitoring tool?

Having a monitoring tool gives a lot of benefits for system administrators and ITs especially when handling several servers. Monitoring tools like Nagios is useful for checking the status of networks, services, servers, and applications constantly. This will help administrators in optimizing the performance of the servers and improve the efficiency of it.

Conclusions:

- In this activity, we are able to apply what we learned in the past activity. We are tasked to install Nagios in both servers using roles. For me it was a challenge since it is my first time encountering Nagios. Having no background and experience in installing Nagios is difficult, especially in making a playbook for it. There are many challenges I encounter in doing the playbook. I need to know the prerequisites of the Nagios in order to install. I also need to research the command used to install Nagios in different distributions. And lastly How I will sequence it in the playbook.