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Course/Section: CPE212- CPE31S21	Date Submitted:10/18/24
Instructor: Engr. Valenzuela	Semester and SY:
Activity 8: Install, Configure, and Manage Availability Monitoring tools	

1. Objectives

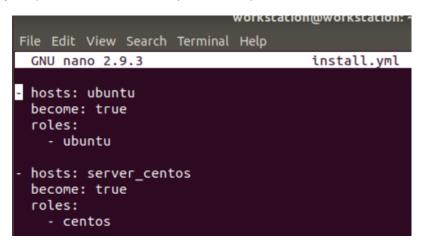
Create and design a workflow that installs, configure and manage enterprise monitoring tools using Ansible as an Infrastructure as Code (IaC) tool.

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)



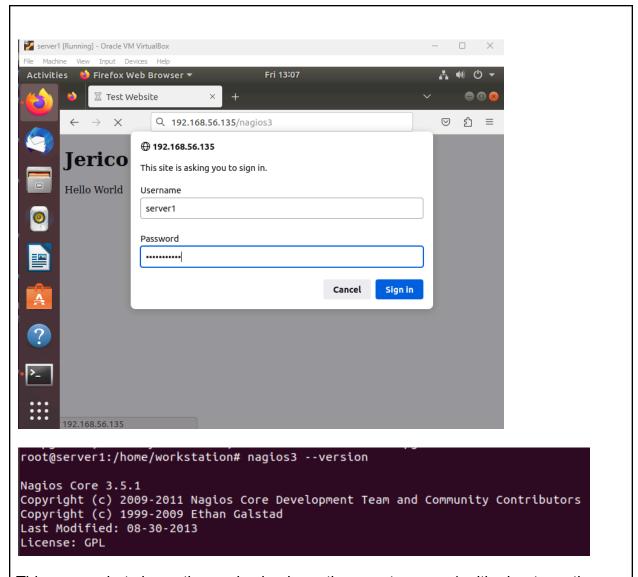
In this part the playbook will play the syntax inside the roles folder and will perform that task specifically on both servers.

```
File Edit View Search Terminal Help
 GNU nano 2.9.3
                                       main.yml
 name: Install dependencies for Nagios on CentOS
 yum:
   name:
     - httpd
     - php
     - wget
     - gcc
   state: present
 name: Download Nagios tarball
 get_url:
   url: https://assets.nagios.com/downloads/nagioscore/releases/na
   dest: /tmp/nagios.tar.gz
 name: Extract Nagios tarball
 unarchive:
   src: /tmp/nagios.tar.gz
dest: /opt/
   remote_src: yes
 name: Configure Nagios
 command: ./configure --with-httpd-conf=/etc/httpd/conf.d/
```

In this part it shows the yml file inside the role directory for CentOS, it will perform the installation of the Nagio on CentOS.

```
File Edit View Search Terminal Help
 GNU nano 2.9.3
                                       main.yml
 name: Install dependencies for Nagios on Ubuntu
 apt:
   name:
      - apache2
      - php
      - libapache2-mod-php
      - wget
    state: present
- name: Download Nagios tarball
  get_url:
   url: https://assets.nagios.com/downloads/nagioscore/releases/nagios-4.4.6.$
   dest: /tmp/nagios.tar.gz
 name: Extract Nagios tarball
 unarchive:
   src: /tmp/nagios.tar.gz
   dest: /opt/
   remote_src: yes
 name: Configure Nagios
  command: ./configure --with-httpd-conf=/etc/apache2/sites-enabled/
  args:
```

This screenshot shows the playbook for the ubuntu installation of Nagios.



This screenshot shows the nagios log in on the remote server1 with ubuntu as the OS.

Reflections:

Answer the following:

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

Having an availability monitoring tool in a network helps a lot in managing the computers within the network. Remotely monitoring different systems within a network will help a company in efficiency if one their machine encountered a problem, configuring the devices connected to the network remotely, will also be more productive than waiting for a system administration to travel to your workplace.

Conclusions:

In conclusion, upon finishing this activity I learned how to install the nagios in ubuntu and Centos server, this will strengthen my knowledge in installing different softwares in ubuntu and centos for the next activities. I also applied the role concept in ansible.