Assignment 2:

Installing Your Monitoring Service

Student Information

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Date (dd/mm/yy):15/09/2024

**Step 1 Initial Configuration:**

Complete this section AFTER finishing step 1 of the assignment.

Nagios Installation and Configuration

Linux Distribution Used: **UBUNTU**

System IP Address:

Current IP Address: 10.0.2.15 (Before change)

Static IP Address Based on first name initial from Appendix A (e.g., A = .200, B = .201, etc.)

Static IP Address: 10.0.2.218 (After change)

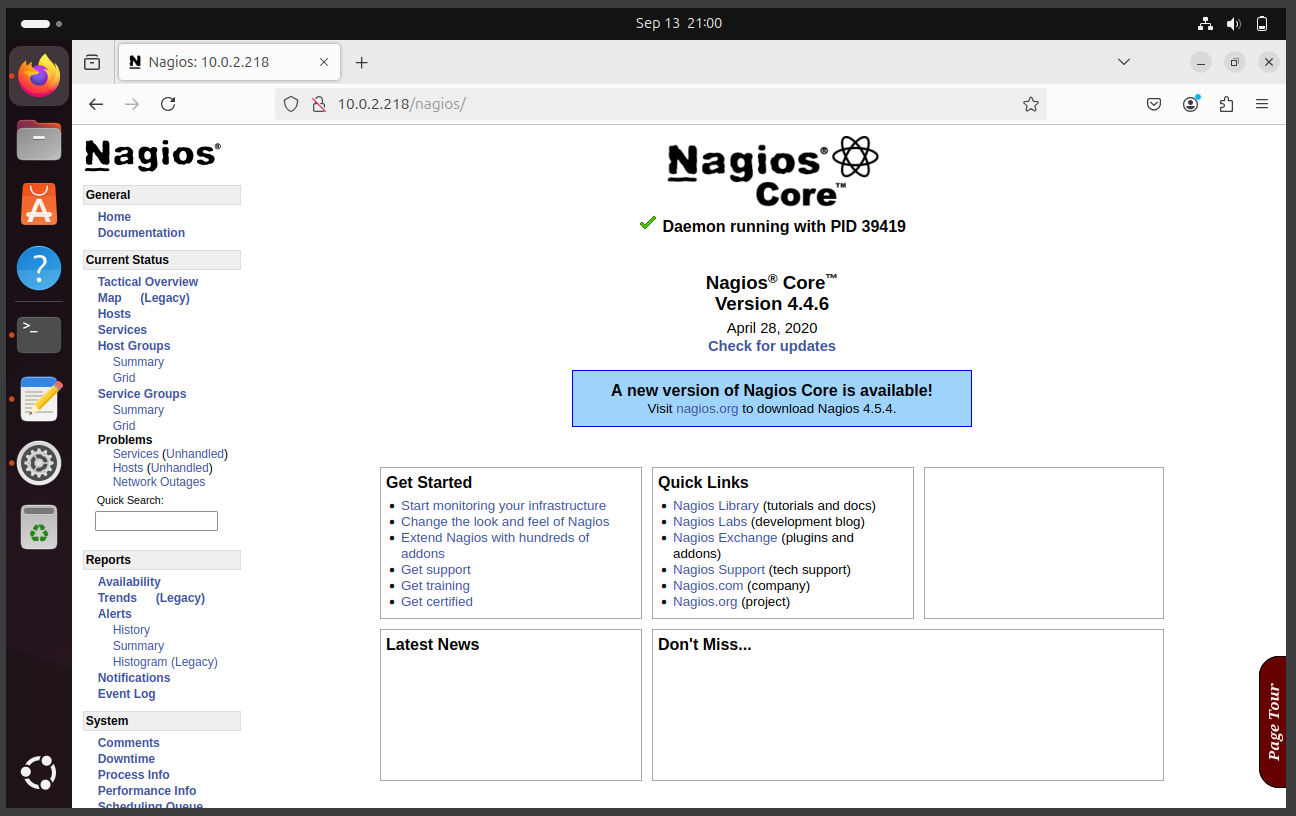
Web Browser Access:

URL: http://10.0.2.218/nagios

Login Credentials Setup: admin and password: Suc28obanor@

Tactical Overview Screenshot:

Screenshot: Insert a clear screenshot of the Nagios Tactical Overview page here with the IP address visible.

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**Part 2: Script and Command Descriptions**

Step 2: Command Interpretation

Script Commands:

* Command: sudo apt install wget unzip curl openssl build-essential libgd-dev libssl-dev libapache2-mod-php php-gd php apache2 -y

Description: This command installs essential packages required for Nagios, including development tools (build-essential), SSL libraries (libssl-dev), Apache web server (apache2), and PHP modules (php-gd, libapache2-mod-php) that are necessary for Nagios functionality.

* Command: wget https://assets.nagios.com/downloads/nagioscore/releases/nagios-4.4.6.tar.gz

Description: This uses wget to download the Nagios Core source package (version 4.4.6) from the official Nagios site.

* Command: sudo tar -zxvf nagios-4.4.6.tar.gz

Description: This command extracts the contents of the nagios-4.4.6.tar.gz archive, with the flags indicating to decompress a .tar.gz file, extract its contents, show detailed progress, and specify the file to be extracted.

* Command: cd nagios-4.4.6

Description: Changes the working directory to the nagios-4.4.6 folder, which contains the source code for Nagios.

* Command: sudo ./configure

Description: Prepares the build environment for Nagios by checking for necessary dependencies and setting up configuration files needed for compiling the software.

* Command: sudo make all

Description: Compiles Nagios Core and its web interface scripts using the Makefile generated by the ./configure command to process the source code.

* Command: sudo make install-groups-users

Description: Creates the system user and group for Nagios, ensuring it runs with its own permissions for enhanced security.

* Command: sudo usermod -a -G nagios www-data

Description: Adds the Apache web server user (www-data) to the Nagios group to grant it access to Nagios files.

* Command: sudo make install

Description: Installs Nagios Core by copying the compiled files and necessary configuration into their appropriate locations on the system.

* Command:sudo make install-init

Description: Sets up the Nagios Core initialization script, enabling you to manage the Nagios service using standard service commands.

* sudo make install-commandmode

Description: Configures permissions for Nagios command files and directories, allowing secure interaction with Nagios commands by other users, including the web server.

* Command: sudo make install-config

Description: Installs sample configuration files to help you begin setting up Nagios monitoring.

* Command: sudo make install-webconf

Description: Installs the web interface configuration for Apache, which is required to run Nagios through a web browser.

* Command: sudo a2enmod rewrite

Description: Activates the Apache rewrite module, which is often necessary for URL redirection and handling HTTP requests required by Nagios.

* Command: sudo a2enmod cgi

Description: Enables the CGI module in Apache, which is needed for running CGI scripts that are part of the Nagios web interface.

* Command: sudo systemctl restart apache2

Description: Restarts the Apache web server to apply the new configuration and enable the Nagios web interface.

* Command: sudo htpasswd -c /usr/local/nagios/etc/htpasswd.users admin

Description: Creates a user named admin for accessing the Nagios web interface and sets up a password for this user.

* Command: cd ~/

Description: Navigates to the home directory of the current user.

* Command: wget https://nagios-plugins.org/download/nagios-plugins-2.3.3.tar.gz

Description: Downloads the Nagios plugins package (version 2.3.3), which is necessary for monitoring various services.

* Command: sudo tar -zxvf nagios-plugins-2.3.3.tar.gz

Description: Extracts the contents of the nagios-plugins-2.3.3.tar.gz file.

* Command: cd nagios-plugins-2.3.3/

Description: Changes to the directory containing the extracted Nagios plugins files.

* Command: sudo ./configure --with-nagios-user=nagios --with-nagios-group=nagios

Description: Configures the build settings for the Nagios plugins, specifying that they should be associated with the nagios user and group.

* Command: sudo make

Description: Compiles the Nagios plugins from source code.

* Command: sudo make install

Description: Installs the compiled Nagios plugins onto the system.

* Command: sudo /usr/local/nagios/bin/nagios -v /usr/local/nagios/etc/nagios.cfg

Description: Checks the Nagios configuration file for errors or issues before starting the service.

* Command: sudo systemctl start nagios

Description: Starts the Nagios service, making it active and operational.

* Command: sudo systemctl enable nagios

Description: Configures Nagios to automatically start when the system boots up.