Assignment 3:

Configure Monitoring to Enable Health Checks

Student Information

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Part 1: Screenshots of completed health checks

(Insert screenshots of completed checks here)

Part 2: Configuration guide

Create your guide below, remember to site all your sources and provide screenshots taken of your own work for each step that you are documenting.

STEPS TAKEN IN CONFIGURING MONITORING TO ENABLE HEALTH CHECKS ON NAGIOS.

Overview

Nagios is an open-source monitoring system that provides comprehensive monitoring and alerting for servers, network devices, and applications. One of its key functionalities is performing health checks to ensure that systems are running optimally and to detect potential issues before they escalate.

CONFIGURATION GUIDE FOR MONITORING TO ENABLE HEALTH CHECK FOR NAGIOS.

Step 1: Locate Nagios

1. Open Terminal: Start by opening your terminal on the Nagios server.
2. Locate Nagios:

Use the following command to find the installation path of Nagios: whereis nagios

Step 2: Create a Directory for Servers

1. Create a Directory:

Create a directory to store server configurations: mkdir servers

1. Change Directory:

Navigate into the newly created directory: cd servers

Step 3: Install the Linux-NRPE Agent on Nagios

1. Change Directory to libexec: Navigate to the libexec directory: cd /usr/local/nagios/libexec
2. Download the NRPE Agent:

Use the following command to download the NRPE agent: sudo wget http://assets.nagios.com/downloads/nagiosxi/agents/linux-nrpe-agent.tar.gz

1. Extract the Downloaded File:

Extract the contents of the downloaded tar file: sudo tar xzf linux-nrpe-agent.tar.gz

1. Change Directory to NRPE Agent:

Navigate into the extracted directory: cd linux-nrpe-agent

1. Run the Installation Script:

Execute the installation script to install the NRPE agent: sudo ./fullinstall

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Step 4: Define and Create Host and Service Files

1. Change Directory to Objects: Navigate to the objects directory: cd /usr/local/nagios/etc/objects
2. Create Host Configuration File: Create a new host configuration file: sudo touch host.cfg
3. Edit the Host Configuration File: Open the file using nano: sudo nano host.cfg
4. Define the Host:

Add the following configuration to define the host:

define host {

use linux-server

host\_name TestHost

alias TestHost

address <IP address>

}

Replace <IP address> with the actual IP address of the host you want to monitor as seen below. A screenshot of a computer

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Create the Service Configuration File: Sudo touch service.cfg

Open the Service Configuration File: sudo nano service.cfg

Define the Web, Memory, and Disk Services

Add the following service definitions to the service.cfg file:

# Define Web Service

define service {

use local-service

host\_name TestHost

service\_description web\_check

check\_command check\_http!15%!10%

}

# Define Memory Usage Service

define service {

use local-service

host\_name TestHost

service\_description Memory Usage

check\_command check\_mem

}

# Define Disk Usage Service

define service {

use generic-service

host\_name TestHost

service\_description hard\_disk

check\_command check\_disk!15%!10%

}

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Save and Exit

1. Save the Changes Exit the Editor: Press CTRL + X , then Y and Enter Key to Save and Exit the Editor after configuring the host and service.

Step 4: Navigate to the Nagios Configuration Directory

1. Change Directory to Nagios Configuration: cd /usr/local/nagios/etc

Step 5: Open the nagios.cfg File

1. Edit the nagios.cfg File: sudo nano nagios.cfg
2. Ensure the Service Configuration File is Included:

Look for the line that includes the service configuration file. It should look something like this: cfg\_file=/usr/local/nagios/etc/objects/service.cfg

If it’s not present, add it to the file.

1. Save the Changes Exit the Editor: Press CTRL + X, then Y and Enter Key to Save and Exit the Editor after configuring the host and service.

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Step 3: Open the commands.cfg File

1. Edit the commands.cfg File: sudo nano commands.cfg
2. Define Check Commands: Ensure that the check commands for web, memory, and disk services are defined. You may need to add or verify the following entries:
3. In this case we defined the memory service:

define command {

command\_name check\_mem

command\_line $USER1$/check\_nrpe -H $HOSTADDRESS$ -c check\_mem -a ‘-w 15% -c 10%’

}

1. Save the Changes Exit the Editor: Press CTRL + X, then Y and Enter Key to Save and Exit the Editor after configuring the host and service.

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Step 4: Verify Configuration

1. Verify the Configuration: sudo nagios -v /usr/local/nagios/etc/nagios.cfg

Ensure there are no errors in the configuration.

Step 5: Restart Nagios

1. Restart the Nagios Service: sudo systemctl restart nagios

Step 6: Check the Nagios Web Interface

1. Access the Nagios Web Interface: Open your web browser and navigate to http://<Nagios\_Server\_IP>/nagios

Replace <Nagios\_Server\_IP> with the actual IP address of your Nagios server.

1. Log In: Use your Nagios credentials to log in.
2. View Services: Navigate to the "Services" section to see the newly added web, memory, and disk services, it will show pending then if properly configured after some time show OK.

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Conclusion.

Been able to put the necessary configurations in place, added web, memory, and disk services to your Nagios setup. Regularly monitor these services through the Nagios web interface to ensure optimal performance of your systems.

REFERENCES.

* Nagios Documentation: [Nagios Official Documentation](https://nagios.org/documentation)
* Installation Guide for NRPE: [NRPE Installation Guide](http://assets.nagios.com/downloads/nagiosxi/agents/linux-nrpe-agent.tar.gz)