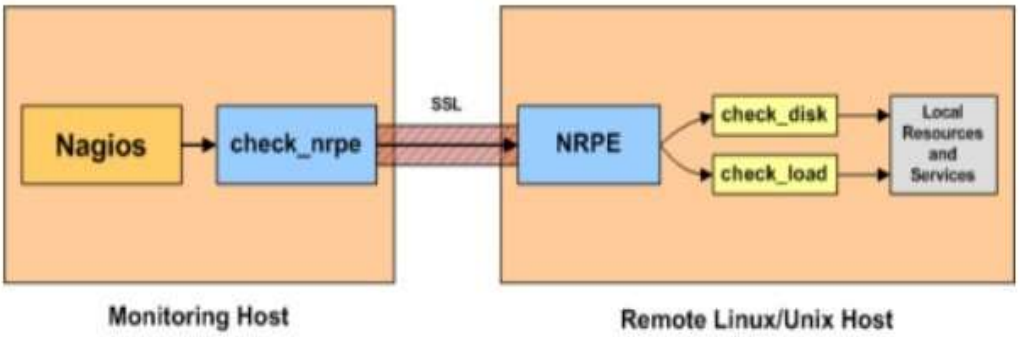
Academic Year: 2022-23 **Semester: V**
Class / Branch: TE IT
Subject: Advanced Devops Lab (ADL)
Subject Lab Incharge: Prof. Manasi Choche

EXPERIMENT NO. 10

Aim: To perform Port, Service monitoring, Linux server monitoring using Nagios.

Theory:

Monitoring remote Linux/Unix hosts is to use the NRPE addon. NRPE allows you to execute plugins on remote Linux/Unix hosts. This is useful if you need to monitor local resources/attributes like disk usage, CPU load, memory usage, etc. on a remote host.



Note: To perform this experiment Experiment 9 is pre-requisite where we have configured Nagios on Linux System. Here In this Experiment we will Add a Linux Host to Nagios for Monitoring purpose.

Step 1 – Configure NRPE on Linux Host

Follow the below steps to install and configure NRPE on client machine and check connectivity with Nagios server.

Step 1.1 – Install NRPE

```
vishal@apsit:~$  sudo apt-get install nagios-nrpe-server nagios-plugins
```

Step 1.2 – Configure NRPE

After successfully installing NRPE service, Edit nrpe configuration file /etc/nagios/nrpe.cfg in your favorite editor and add your nagios service ip in allowed hosts.

```
vishal@apsit:~$ sudo nano /etc/nagios/nrpe.cfg
```

```
allowed_hosts=127.0.0.1, 192.168.64.3, 192.168.1.100
```

Where **192.168.1.100** is your Nagios server ip address.

After making above changes in nrpe configuration file, Lets restart NRPE service as per your system

```
vishal@apsit:~$ sudo /etc/init.d/nagios-nrpe-server restart
```

Step 1.3 – Verify Connectivity from Nagios

Now run the below command from Nagios server to make sure your nagios is able to connect nrpe client on remote Linux system. Here **192.168.64.3** is your remote Linux system ip.

```
vishal@apsit:~$ /usr/local/nagios/libexec/check_nrpe -H 192.168.64.3
NRPE v2.15
```

Step 2 – Add Linux Host in Nagios

First create a configuration file using below values. for example you Linux hosts ip is . We also need to define a service with host. So add a ping check service, which will continuously check that host is up or not.

```
vishal@apsit:~$  sudo nano /usr/local/nagios/etc/servers/MyLinuxHost001.cfg
```

```
define host {
        use                             linux-server
        host_name                       Linux_Host_001
        alias                           Linux Host 001
        address                         192.168.64.3
        register                        1
}
define service{
      host_name                         Linux_Host_001
      service_description               PING
      check_command                     check_ping!100.0,20%!500.0,60%
      max_check_attempts                2
      check_interval                    2
```

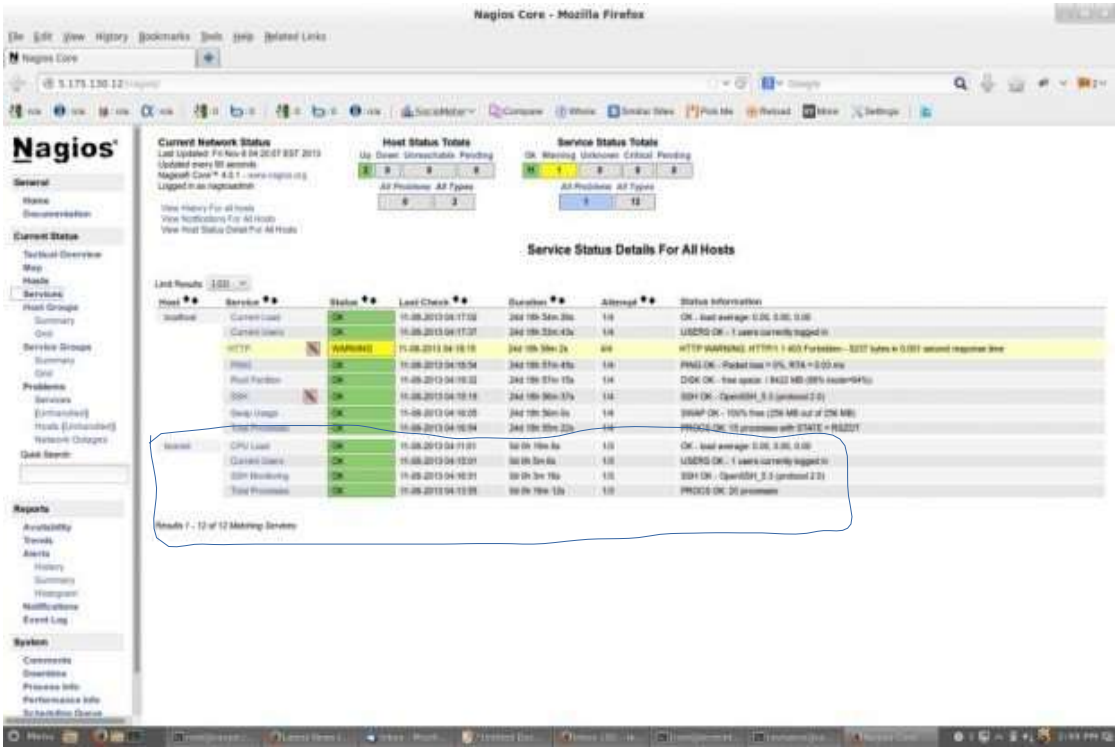
```
        retry_interval                  2
        check_period                    24x7
        check_freshness                 1
        contact_groups                  admins
        notification_interval           2
        notification_period             24x7
        notifications_enabled           1
        register                        1
}
```

Now verify configuration files using following command. If there are no errors found in configuration, restart nagios service.

```
vishal@apsit:~$ sudo nagios -v /usr/local/nagios/etc/nagios.cfg
vishal@apsit:~$ sudo service nagios restart
```

Step 3 – Check Host in Nagios Web Interface

Open your Nagios web interface and check for new Linux hosts added in Nagios core service.



Conclusion: Write your own findings.