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**Subject: Advanced Devops Lab (ADL)**

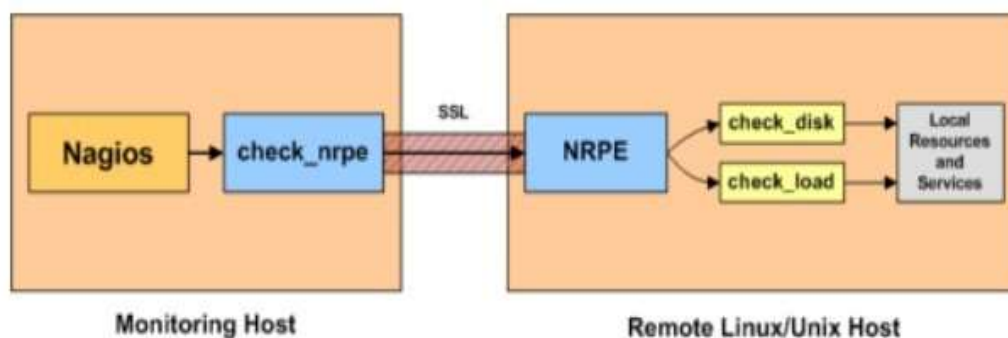
**Subject Lab Incharge: Prof. Manasi Choche**

## 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
```



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```
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.

The screenshot displays the Nagios Core web interface in a Mozilla Firefox browser. The interface includes a sidebar with navigation links such as General, Services, Hosts, and Reports. The main content area shows the 'Current Network Status' and 'Host Status Totals'. A table titled 'Service Status Details For All Hosts' is visible, listing various services and their statuses. A blue box highlights the 'Hosts' section, which shows a list of hosts with their respective service statuses. The table has columns for Host, Service, Status, Last Check, Duration, Attempts, and Status Information. The 'Hosts' section shows 12 hosts, with 7 of them being 'Monitoring'.

**Conclusion:** Write your own findings.