

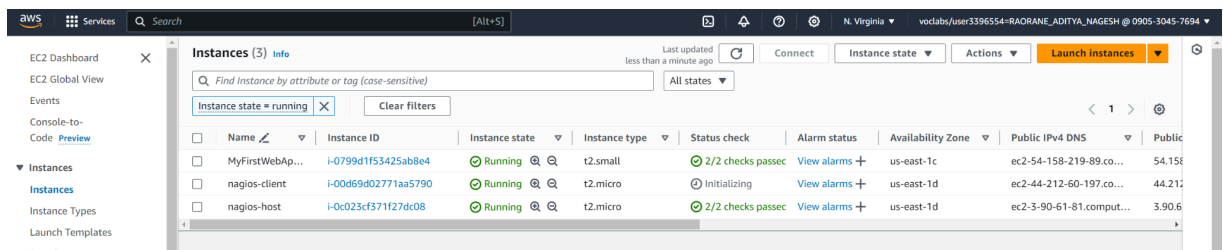
Aim: To perform Port, Service monitoring, Windows/Linux server monitoring using Nagios.

1. To Confirm that Nagios is running **on the server side**, run this ***sudo systemctl status nagios*** on the **nagios-host**.

```
[ec2-user@ip-172-31-80-195 ~]$ sudo systemctl status nagios
● nagios.service - Nagios Core 4.5.5
   Loaded: loaded (/usr/lib/systemd/system/nagios.service; enabled; vendor preset: enabled)
   Active: active (running) since Fri 2024-09-27 11:43:06 UTC; 1min 10s ago
     Docs: https://www.nagios.org/documentation
   Process: 65083 ExecStartPre=/usr/local/nagios/bin/nagios -v > /dev/null (code=exited, status=0/SUCCESS)
   Process: 65084 ExecStart=/usr/local/nagios/bin/nagios -d /usr/local/nagios/etc/nagios.cfg (code=exited, status=0/SUCCESS)
 Main PID: 65085 (nagios)
    Tasks: 6 (Limit: 1112)
   Memory: 5.7M
      CPU: 86ms
   CGroup: /system.slice/nagios.service
           └─65085 /usr/local/nagios/bin/nagios -d /usr/local/nagios/etc/nagios.cfg
              └─65086 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/etc/nagios.cfg
                 └─65087 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/etc/nagios.cfg
                    └─65088 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/etc/nagios.cfg
                       └─65089 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/etc/nagios.cfg
                          └─65090 /usr/local/nagios/bin/nagios -d /usr/local/nagios/etc/nagios.cfg

Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: qh: 1
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: qh: 2
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: qh: 3
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: qh: 4
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 1
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 2
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 3
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 4
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 5
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 6
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 7
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 8
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 9
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 10
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 11
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 12
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 13
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 14
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 15
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 16
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 17
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 18
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 19
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 20
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 21
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 22
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 23
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 24
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 25
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 26
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 27
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 28
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 29
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 30
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 31
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 32
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 33
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 34
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 35
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 36
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 37
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 38
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 39
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 40
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 41
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 42
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 43
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 44
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 45
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 46
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 47
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 48
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 49
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 50
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 51
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 52
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 53
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 54
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 55
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 56
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 57
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 58
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 59
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 60
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 61
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 62
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 63
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 64
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 65
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 66
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 67
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 68
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 69
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 70
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 71
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 72
Sep 27 11:43:06 ip-172-31-80-195.ec2.internal nagios[65085]: wpr: 73
Sep 27 11:43:06 ip-172-31-80
```

2. To monitor a Linux machine, create an Ubuntu server EC2 Instance in AWS. Provide it with the same security group as the nagios-host and name it 'nagios-client' alongside the host.



For now, leave this machine as is, and go back to your nagios-host.

3. On the server, run this command

```
ps -ef | grep nagios
```

```

[ec2-user@ip-172-31-80-195 ~]$ ps -ef | grep nagios
nagios    65085      1    0 11:43 ?        00:00:00 /usr/local/nagios/bin/nagios -d /usr/local/nagios/etc/nagios.cfg
nagios    65086    65085  0 11:43 ?        00:00:00 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
nagios    65087    65085  0 11:43 ?        00:00:00 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
nagios    65088    65085  0 11:43 ?        00:00:00 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
nagios    65089    65085  0 11:43 ?        00:00:00 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
nagios    65090    65085  0 11:43 ?        00:00:00 /usr/local/nagios/bin/nagios -d /usr/local/nagios/etc/nagios.cfg
ec2-user  65683      2261  0 11:52 pts/0    00:00:00 grep --color=auto nagios

```

4. Become a root user and create 2 folders

```
sudo su
```

```
mkdir /usr/local/nagios/etc/objects/monitorhosts
```

```
mkdir /usr/local/nagios/etc/objects/monitorhosts/linuxhosts
```

```

[ec2-user@ip-172-31-80-195 ~]$ sudo su
mkdir /usr/local/nagios/etc/objects/monitorhosts
mkdir /usr/local/nagios/etc/objects/monitorhosts/linuxhosts

```

5. Copy the sample localhost.cfg file to linuxhost folder

```
cp /usr/local/nagios/etc/objects/localhost.cfg
```

```
/usr/local/nagios/etc/objects/monitorhosts/linuxhosts/linuxserver
```

```

[root@ip-172-31-80-195 ec2-user]# sudo cp /usr/local/nagios/etc/objects/localhost.cfg /usr/local/nagios/etc/objects/monitorhosts/linuxhosts/linuxserver.cfg
[root@ip-172-31-80-195 ec2-user]# nano
/usr/local/nagios/etc/objects/monitorhosts/linuxhosts/linuxserver.cfg

```

6. Open linuxserver.cfg using nano and make the following changes

```
nano
```

```
/usr/local/nagios/etc/objects/monitorhosts/linuxhosts/linuxserver.cfg
```

```

[root@ip-172-31-80-195 ec2-user]# nano /usr/local/nagios/etc/objects/monitorhosts/linuxhosts/linuxserver.cfg
[root@ip-172-31-80-195 ec2-user]# nano /usr/local/nagios/etc/nagios.cfg

```

```

GNU nano 5.8 /usr/local/nagios/etc/objects/monitorhosts/linuxhosts/linuxserver.cfg

#####
#
# HOST DEFINITION
#
#####

# Define a host for the local machine
define host {
    use                linux-server          ; Name of host template to use
                                           ; This host definition will inherit all variables that are defined
                                           ; in (or inherited by) the linux-server host template definition.

    host_name          localhost
    alias              localhost
    address            172.31.80.195
}

#####
#
# HOST GROUP DEFINITION

```

```
root@ip-172-31-80-195:/home x ubuntu@ip-172-31-82-105: +
```

```
GNU nano 5.8 /usr/local/nagios/etc/objects/monitorhosts/linuxhosts/linuxserver.cfg Modified
```

```
#####  
#  
# HOST DEFINITION  
#  
#####  
  
# Define a host for the local machine  
  
define host {  
  
    use                linux-server          ; Name of host template to use  
                                     ; This host definition will inherit all variables that are defined  
                                     ; in (or inherited by) the linux-server host template definition.  
  
    host_name          localhost  
    alias              localhost  
    address            172.31.80.195  
}  
  
#####  
#  
# HOST GROUP DEFINITION  
#  
#####  
  
# Define an optional hostgroup for Linux machines  
  
define hostgroup {  
  
    hostgroup_name     linux-servers|        ; The name of the hostgroup  
    alias             Linux Servers         ; Long name of the group  
    members           localhost             ; Comma separated list of hosts that belong to this group  
}  
  
#####  
#
```

```
AG Help      PG Write Out   RW Where Is    RT Cut        LF Execute  
X Exit       R Read File  U Replace     U Paste      / Go To Line  M Undo  
M= Redo      W= Set Mark  C To Bracket  Q Where Was  W Previous  
N Next
```

7. Open the Nagios Config file and add the following line

```
nano /usr/local/nagios/etc/nagios.cfg
```

```
cfg_dir=/usr/local/nagios/etc/objects/monitorhosts
```

```

root@ip-172-31-80-195:/home ~
root@ip-172-31-80-195: ~
GNU nano 5.8 /usr/local/nagios/etc/nagios.cfg
#####
#
# NAGIOS.CFG - Sample Main Config File for Nagios 4.5.5
#
# Read the documentation for more information on this configuration
# file. I've provided some comments here, but things may not be so
# clear without further explanation.
#
#####

# LOG FILE
# This is the main log file where service and host events are logged
# for historical purposes. This should be the first option specified
# in the config file!!!

log_file=/usr/local/nagios/var/nagios.log

# OBJECT CONFIGURATION FILE(S)
# These are the object configuration files in which you define hosts,
# host groups, contacts, contact groups, services, etc.
# You can split your object definitions across several config files
# if you wish (as shown below), or keep them all in a single config file.

# You can specify individual object config files as shown below:
cfg_file=/usr/local/nagios/etc/objects/commands.cfg
cfg_file=/usr/local/nagios/etc/objects/contacts.cfg
cfg_file=/usr/local/nagios/etc/objects/timperiods.cfg
cfg_file=/usr/local/nagios/etc/objects/templates.cfg
cfg_dir=/usr/local/nagios/etc/objects/monitorhosts/
# Definitions for monitoring the local (Linux) host
cfg_file=/usr/local/nagios/etc/objects/localhost.cfg

# Definitions for monitoring a Windows machine
#cfg_file=/usr/local/nagios/etc/objects/windows.cfg

# Definitions for monitoring a router/switch
#cfg_file=/usr/local/nagios/etc/objects/switch.cfg

[ Read 1378 lines ]
Help Write Out Write File Where Is Cut Execute Location Undo Set Mark To Bracket Previous
Exit Read File Replace Paste Justify / Go To Line Redo Copy Where Was Next

```

8. Verify the configuration files

```

Command Prompt
Windows PowerShell
[root@ip-172-31-80-195 ec2-user]# /usr/local/nagios/bin/nagios -v /usr/local/nagios/etc/nagios.cfg

Nagios Core 4.5.5
Copyright (c) 2009-present Nagios Core Development Team and Community Contributors
Copyright (c) 1999-2009 Ethan Galstad
Last Modified: 2024-09-17
License: GPL

Website: https://www.nagios.org
Reading configuration data...
  Read main config file okay...
Warning: Duplicate definition found for service 'HTTP' on host 'localhost' (config file '/usr/local/nagios/etc/objects/monitorhosts/linuxhosts/linuxserver.cfg', starting on line 152)
Warning: Duplicate definition found for service 'SSH' on host 'localhost' (config file '/usr/local/nagios/etc/objects/monitorhosts/linuxhosts/linuxserver.cfg', starting on line 138)
Warning: Duplicate definition found for service 'Swap Usage' on host 'localhost' (config file '/usr/local/nagios/etc/objects/monitorhosts/linuxhosts/linuxserver.cfg', starting on line 129)
Warning: Duplicate definition found for service 'Current Load' on host 'localhost' (config file '/usr/local/nagios/etc/objects/monitorhosts/linuxhosts/linuxserver.cfg', starting on line 112)
Warning: Duplicate definition found for service 'Total Processes' on host 'localhost' (config file '/usr/local/nagios/etc/objects/monitorhosts/linuxhosts/linuxserver.cfg', starting on line 100)
Warning: Duplicate definition found for service 'Current Users' on host 'localhost' (config file '/usr/local/nagios/etc/objects/monitorhosts/linuxhosts/linuxserver.cfg', starting on line 86)
Warning: Duplicate definition found for service 'Root Partition' on host 'localhost' (config file '/usr/local/nagios/etc/objects/monitorhosts/linuxhosts/linuxserver.cfg', starting on line 72)
Warning: Duplicate definition found for service 'PING' on host 'localhost' (config file '/usr/local/nagios/etc/objects/monitorhosts/linuxhosts/linuxserver.cfg', starting on line 58)
  Read object config files okay...

Running pre-flight check on configuration data...

Checking objects...
  Checked 8 services.
  Checked 2 hosts.
  Checked 2 host groups.
  Checked 0 service groups.
  Checked 1 contacts.
  Checked 1 contact groups.
  Checked 24 commands.
  Checked 5 time periods.
  Checked 0 host escalations.
  Checked 0 service escalations.
Checking for circular paths...
  Checked 2 hosts
  Checked 0 service dependencies
  Checked 0 host dependencies

```

```

Command Prompt
Windows PowerShell
  Checked 0 host dependencies
  Checked 5 timeperiods
Checking global event handlers...
Checking obsessive compulsive processor commands...
Checking misc settings...

Total Warnings: 0
Total Errors: 0

Things look okay - No serious problems were detected during the pre-flight check

```

9. Restart the nagios service by service nagios restart.

```

[root@ip-172-31-80-195 ec2-user]# service nagios restart
Redirecting to /bin/systemctl restart nagios.service
[root@ip-172-31-80-195 ec2-user]# sudo systemctl status nagios
● nagios.service - Nagios Core 4.5.5
   Loaded: loaded (/usr/lib/systemd/system/nagios.service; enabled; preset: disabled)
   Active: active (running) since Fri 2024-09-27 12:24:39 UTC; 23s ago
     Docs: https://www.nagios.org/documentation
   Process: 67567 ExecStartPre=/usr/local/nagios/bin/nagios -v /usr/local/nagios/etc/nagios.cfg (code=exited, status=0/SUCCESS)
   Process: 67568 ExecStart=/usr/local/nagios/bin/nagios -d /usr/local/nagios/etc/nagios.cfg (code=exited, status=0/SUCCESS)
   Main PID: 67569 (nagios)
    Tasks: 6 (limit: 1112)
   Memory: 4.0M
     CPU: 21ms
   CGroup: /system.slice/nagios.service
           └─67569 /usr/local/nagios/bin/nagios -d /usr/local/nagios/etc/nagios.cfg
             └─67570 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
               └─67571 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
                 └─67572 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
                   └─67573 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
                     └─67574 /usr/local/nagios/bin/nagios -d /usr/local/nagios/etc/nagios.cfg

Sep 27 12:24:39 ip-172-31-80-195.ec2.internal nagios[67569]: wproc: Registry request: name=Core Worker 67570;pid=67570
Sep 27 12:24:39 ip-172-31-80-195.ec2.internal nagios[67569]: Warning: Duplicate definition found for service 'HTTP' on host 'localhost' (config file '/usr/local/nagios/etc/object
Sep 27 12:24:39 ip-172-31-80-195.ec2.internal nagios[67569]: Warning: Duplicate definition found for service 'SSH' on host 'localhost' (config file '/usr/local/nagios/etc/object
Sep 27 12:24:39 ip-172-31-80-195.ec2.internal nagios[67569]: Warning: Duplicate definition found for service 'Swap Usage' on host 'localhost' (config file '/usr/local/nagios/etc/
Sep 27 12:24:39 ip-172-31-80-195.ec2.internal nagios[67569]: Warning: Duplicate definition found for service 'Current Load' on host 'localhost' (config file '/usr/local/nagios/etc
Sep 27 12:24:39 ip-172-31-80-195.ec2.internal nagios[67569]: Warning: Duplicate definition found for service 'Total Processes' on host 'localhost' (config file '/usr/local/nagios
Sep 27 12:24:39 ip-172-31-80-195.ec2.internal nagios[67569]: Warning: Duplicate definition found for service 'Current Users' on host 'localhost' (config file '/usr/local/nagios/e
Sep 27 12:24:39 ip-172-31-80-195.ec2.internal nagios[67569]: Warning: Duplicate definition found for service 'Root Partition' on host 'localhost' (config file '/usr/local/nagios/
Sep 27 12:24:39 ip-172-31-80-195.ec2.internal nagios[67569]: Warning: Duplicate definition found for service 'PING' on host 'localhost' (config file '/usr/local/nagios/etc/object
Sep 27 12:24:39 ip-172-31-80-195.ec2.internal nagios[67569]: Successfully launched command file worker with pid 67574
Lines 1-28/28 (END)

```

10. Under nagios-client ,SSH into the machine or simply use the EC2 Instance Connect feature.

```

Command Prompt  Windows PowerShell
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS C:\Users\adity> cd Downloads
PS C:\Users\adity\Downloads> ssh -i "ar.pem" ubuntu@ec2-44-212-60-197.compute-1.amazonaws.com
The authenticity of host 'ec2-44-212-60-197.compute-1.amazonaws.com (44.212.60.197)' can't be established.
ED25519 key fingerprint is SHA256:Lwrr9v/VJNu2G/UrjnK/N9yYvSd0CbsG7Ppk83eeKWo.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added 'ec2-44-212-60-197.compute-1.amazonaws.com' (ED25519) to the list of known hosts.
Welcome to Ubuntu 24.04 LTS (GNU/Linux 6.8.0-1012-aws x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/pro

```

11. Make a package index update and install gcc, nagios-nrpe-server and the plugins.

```
sudo apt update -y
```

```
sudo apt install gcc -y
```

```
sudo apt install -y nagios-nrpe-server nagios-plugins
```

```

Command Prompt  Windows PowerShell
ubuntu@ip-172-31-92-105:~$ sudo apt update -y
sudo apt install gcc -y
sudo apt install -y nagios-nrpe-server nagios-plugins
Hit:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble InRelease
Get:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates InRelease [126 kB]
Get:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports InRelease [126 kB]
Get:4 http://security.ubuntu.com/ubuntu noble-security InRelease [126 kB]
Get:5 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 Packages [15.0 MB]
Get:6 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/universe Translation-en [5982 kB]
Get:7 http://security.ubuntu.com/ubuntu noble-security/main amd64 Packages [380 kB]
Get:8 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 Components [3871 kB]
Get:9 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 c-n-f Metadata [301 kB]
Get:10 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/multiverse amd64 Packages [269 kB]
Get:11 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/multiverse Translation-en [118 kB]
Get:12 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/multiverse amd64 Components [35.0 kB]
Get:13 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/multiverse amd64 c-n-f Metadata [8328 B]
Get:14 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 Packages [535 kB]
Get:15 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main Translation-en [130 kB]
Get:16 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 c-n-f Metadata [8636 B]
Get:17 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/universe amd64 Packages [377 kB]
Get:18 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/universe Translation-en [156 kB]
Get:19 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/universe amd64 Components [45.0 kB]
Get:20 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/universe amd64 c-n-f Metadata [14.8 kB]
Get:21 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/restricted amd64 Packages [353 kB]
Get:22 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/restricted Translation-en [68.1 kB]
Get:23 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/restricted amd64 c-n-f Metadata [424 B]
Get:24 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 Packages [14.4 kB]
Get:25 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/multiverse Translation-en [3608 B]
Get:26 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 Components [212 B]
Get:27 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 c-n-f Metadata [532 B]
Get:28 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/main amd64 Components [208 B]
Get:29 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/main amd64 c-n-f Metadata [112 B]
Get:30 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/universe amd64 Packages [10.6 kB]
Get:31 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/universe Translation-en [10.8 kB]
Get:32 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/universe amd64 Components [17.6 kB]
Get:33 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/universe amd64 c-n-f Metadata [1104 B]
Get:34 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/restricted amd64 Components [216 B]
Get:35 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/restricted amd64 c-n-f Metadata [116 B]
Get:36 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/multiverse amd64 Components [212 B]
Get:37 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/multiverse amd64 c-n-f Metadata [116 B]
Get:38 http://security.ubuntu.com/ubuntu noble-security/main Translation-en [82.9 kB]
Get:39 http://security.ubuntu.com/ubuntu noble-security/main amd64 c-n-f Metadata [4560 B]
Get:40 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Packages [272 kB]
Get:41 http://security.ubuntu.com/ubuntu noble-security/universe Translation-en [115 kB]
Get:42 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Components [8632 B]
Get:43 http://security.ubuntu.com/ubuntu noble-security/universe amd64 c-n-f Metadata [10.3 kB]

```

12. Open nrpe.cfg file to make changes.

```
sudo nano /etc/nagios/nrpe.cfg
```

Under `allowed_hosts`, add your nagios-host IP address like so

```
root@ip-172-31-80-195:/home. x  ubuntu@ip-172-31-92-105: ~ x  + v
GNU nano 7.2 /etc/nagios/nrpe.cfg *
#
# NOTE: This option is ignored if NRPE is running under either inetd or xinetd
allowed_hosts=127.0.0.1,3.90.61.81|
```

13. Restart the NRPE server

```
sudo systemctl restart nagios-nrpe-server
```

```
ubuntu@ip-172-31-92-105:~$ sudo nano /etc/nagios/nrpe.cfg
ubuntu@ip-172-31-92-105:~$ sudo systemctl restart nagios-nrpe-server
ubuntu@ip-172-31-92-105:~$
```

14. Now, check your nagios dashboard and you'll see a new host being added.

The screenshot shows the Nagios web interface at 3.90.61.81/nagios/. The dashboard includes a sidebar with navigation links (General, Current Status, Problems, Reports, System) and a main content area. The main area displays 'Current Network Status' (Last updated: Fri Sep 27 12:25:11 UTC 2024), 'Host Status Totals' (Up: 2, Down: 0, Unreachable: 0, Pending: 0), and 'Service Status Totals' (Ok: 4, Warning: 1, Unknown: 0, Critical: 1, Pending: 0). Below these, there is a table titled 'Host Status Details For All Host Groups' showing details for 'insuserver' and 'localhost'.

Host	Status	Last Check	Duration	Status Information
insuserver	UP	09-27-2024 12:24:39	0d 0h 0m 32s+	PING OK - Packet loss = 0%, RTA = 0.03 ms
localhost	UP	09-27-2024 12:07:28	0d 0h 42m 5s	PING OK - Packet loss = 0%, RTA = 0.03 ms

Conclusion: Thus we successfully performed port monitoring of a Linux server using Nagios. Utilizing Nagios for comprehensive monitoring of ports, services, and Windows/Linux servers enhances system reliability, improves performance, and ensures proactive management of IT infrastructure, ultimately driving operational efficiency.