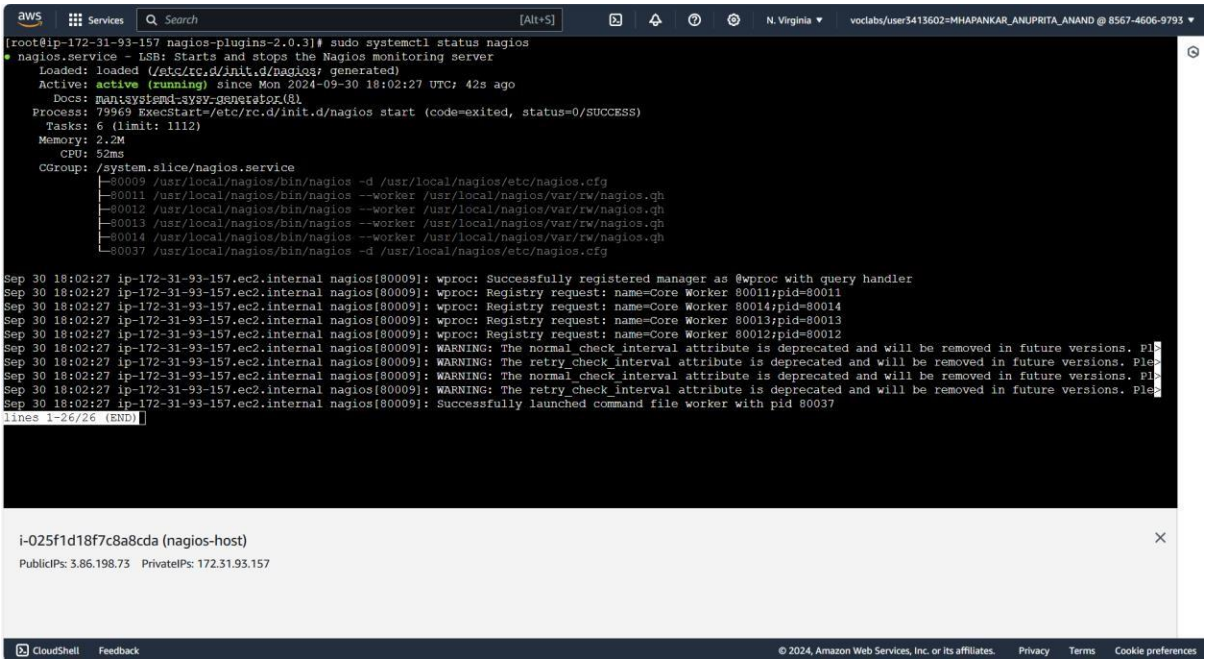
Experiment 10

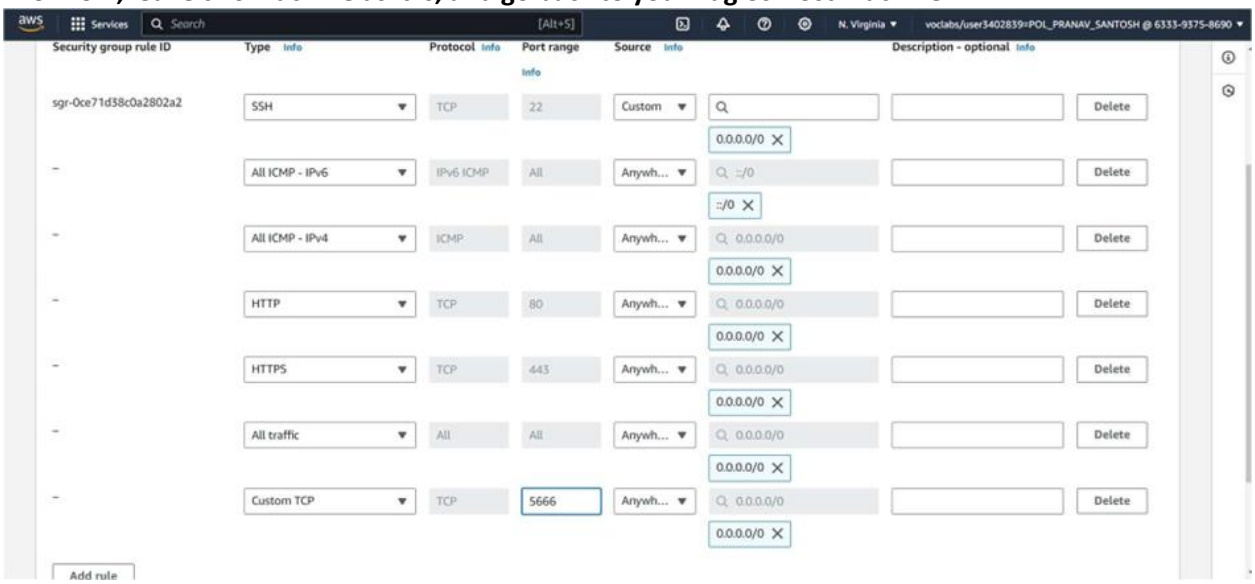
MOHIT PATIL D15 37

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

Step 1: Initially confirm that Nagios is running on the server side. For this run the following command -
sudo systemctl status nagios
on the nagios-host instance.



Step 2: Once confirmed, make another instance with the same security group as that of nagios-host.
For now, leave this machine as it is, and go back to your nagios-host machine.



Step 3: Now run the following command -
ps -ef | grep nagios

```
Active: active (running) since Mon 2024-09-30 18:02:27 UTC; 42s ago
   Docs: man:systemd-sysv-generator(8)
Process: 79969 ExecStart=/etc/rc.d/init.d/nagios start (code=exited, status=0/SUCCESS)
  Tasks: 6 (limit: 1112)
 Memory: 2.2M
    CPU: 52ms
 CGroup: /system.slice/nagios.service
         ├─80009 /usr/local/nagios/bin/nagios -d /usr/local/nagios/etc/nagios.cfg
         ├─80011 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
         ├─80012 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
         ├─80013 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
         ├─80014 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
         └─80037 /usr/local/nagios/bin/nagios -d /usr/local/nagios/etc/nagios.cfg

Sep 30 18:02:27 ip-172-31-93-157.ec2.internal nagios[80009]: wproc: Successfully registered manager as @wproc with query handler
Sep 30 18:02:27 ip-172-31-93-157.ec2.internal nagios[80009]: wproc: Registry request: name=Core Worker 80011;pid=80011
Sep 30 18:02:27 ip-172-31-93-157.ec2.internal nagios[80009]: wproc: Registry request: name=Core Worker 80014;pid=80014
Sep 30 18:02:27 ip-172-31-93-157.ec2.internal nagios[80009]: wproc: Registry request: name=Core Worker 80013;pid=80013
Sep 30 18:02:27 ip-172-31-93-157.ec2.internal nagios[80009]: wproc: Registry request: name=Core Worker 80012;pid=80012
Sep 30 18:02:27 ip-172-31-93-157.ec2.internal nagios[80009]: WARNING: The normal_check_interval attribute is deprecated and will be removed in future versions. Pl
Sep 30 18:02:27 ip-172-31-93-157.ec2.internal nagios[80009]: WARNING: The retry_check_interval attribute is deprecated and will be removed in future versions. Ple
Sep 30 18:02:27 ip-172-31-93-157.ec2.internal nagios[80009]: WARNING: The normal_check_interval attribute is deprecated and will be removed in future versions. Pl
Sep 30 18:02:27 ip-172-31-93-157.ec2.internal nagios[80009]: WARNING: The retry_check_interval attribute is deprecated and will be removed in future versions. Ple
Sep 30 18:02:27 ip-172-31-93-157.ec2.internal nagios[80009]: Successfully launched command file worker with pid 80037

[root@ip-172-31-93-157 nagios-plugins-2.0.3]# ps -ef | grep nagios
nagios     80009       1  0 18:02 ?        00:00:00 /usr/local/nagios/bin/nagios -d /usr/local/nagios/etc/nagios.cfg
nagios     80011   80009  0 18:02 ?        00:00:00 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
nagios     80012   80009  0 18:02 ?        00:00:00 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
nagios     80013   80009  0 18:02 ?        00:00:00 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
nagios     80014   80009  0 18:02 ?        00:00:00 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
nagios     80037   80009  0 18:02 ?        00:00:00 /usr/local/nagios/bin/nagios -d /usr/local/nagios/etc/nagios.cfg
root       81960    3110  0 18:35 pts/1    00:00:00 grep --color=auto nagios
[root@ip-172-31-93-157 nagios-plugins-2.0.3]#
```

i-025f1d18f7c8a8cda (nagios-host)
PublicIPs: 3.86.198.73 PrivateIPs: 172.31.93.157

Step 4: Now, run the following commands -
sudo su
mkdir /usr/local/nagios/etc/objects/monitorhosts
mkdir /usr/local/nagios/etc/objects/monitorhosts/linuxhosts
cp/usr/local/nagios/etc/objects/localhost.cfg/usr/local/nagios/etc/objects/monitorhosts/linuxhosts/linuxserver.cfg

```
root@ip-172-31-93-157 nagios-plugins-2.0.3]# sudo su
root@ip-172-31-93-157 nagios-plugins-2.0.3]# mkdir /usr/local/nagios/etc/objects/monitorhosts
root@ip-172-31-93-157 nagios-plugins-2.0.3]# mkdir /usr/local/nagios/etc/objects/monitorhosts/linuxhosts
root@ip-172-31-93-157 nagios-plugins-2.0.3]# cp /usr/local/nagios/etc/objects/localhost.cfg
usr/local/nagios/etc/objects/monitorhosts/linuxhosts/linuxserver.cfg
p: missing destination file operand after '/usr/local/nagios/etc/objects/localhost.cfg'
ry 'cp --help' for more information.
ash: /usr/local/nagios/etc/objects/monitorhosts/linuxhosts/linuxserver.cfg: No such file or directory
root@ip-172-31-93-157 nagios-plugins-2.0.3]# nano
usr/local/nagios/etc/objects/monitorhosts/linuxhosts/linuxserver.cfg
ash: /usr/local/nagios/etc/objects/monitorhosts/linuxhosts/linuxserver.cfg: No such file or directory
root@ip-172-31-93-157 nagios-plugins-2.0.3]# cp /usr/local/nagios/etc/objects/monitorhosts/linuxhosts/linuxserver.cfg
p: missing destination file operand after '/usr/local/nagios/etc/objects/monitorhosts/linuxhosts/linuxserver.cfg'
ry 'cp --help' for more information.
root@ip-172-31-93-157 nagios-plugins-2.0.3]# cp /usr/local/nagios/etc/objects/localhost.cfg /usr/local/nagios/etc/objects/monitorhosts/linuxhosts/linuxserver.cfg
root@ip-172-31-93-157 nagios-plugins-2.0.3]#
```

i-025f1d18f7c8a8cda (nagios-host)
PublicIPs: 3.86.198.73 PrivateIPs: 172.31.93.157

Step 5: Open linuxserver.cfg using the the following command -
nano /usr/local/nagios/etc/objects/monitorhosts/linuxhosts/linuxserver.cfg

Change the hostname to linuxserver (EVERYWHERE ON THE FILE)
Change address to the public IP address of your LINUX CLIENT.
Change hostgroup_name under hostgroup to linux-servers1

```
GNU nano 5.8                    /usr/local/nagios/etc/objects/monitorhosts/linuxhosts/linuxserver.cfg                    Modified
#       example of how you can create configuration entries to monitor
#       the local (Linux) machine.
#
###############################################################################
###############################################################################
###############################################################################
###############################################################################
#
# 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               linux-server
        alias                   linux-server
        address                 3.95.202.23
        }

###############################################################################
^G Help      ^O Write Out   ^W Where Is    ^K Cut       ^T Execute   ^C Location   M-U Undo      M-A Set Mark   M-] To Bracket  M-Q Previous
^X Exit      ^R Read File   ^\ Replace     ^U Paste     ^J Justify   ^/ Go To Line M-E Redo      M-6 Copy       ^Q Where Was    M-W Next
```

i-025f1d18f7c8a8cda (nagios-host)

PublicIPs: 3.86.198.73 PrivateIPs: 172.31.93.157

```
GNU nano 5.8                    /usr/local/nagios/etc/objects/monitorhosts/linuxhosts/linuxserver.cfg                    Modified
        check_command                   check_local_swap!20!10
        }


# Define a service to check SSH on the local machine.
# Disable notifications for this service by default, as not all users may have SSH enabled.

define service{
        use                             local-service           ; Name of service template to use
        host_name                       linuxserver
        service_description             SSH
        check_command                   check_ssh
        notifications_enabled           0
        }


# Define a service to check HTTP on the local machine.
# Disable notifications for this service by default, as not all users may have HTTP enabled.

define service{
        use                             local-service           ; Name of service template to use
        host_name                       linuxserver
        service_description             HTTP
        check_command                   check_http
        notifications_enabled           0
        }

^G Help      ^O Write Out   ^W Where Is    ^K Cut       ^T Execute   ^C Location   M-U Undo      M-A Set Mark   M-] To Bracket  M-Q Previous
^X Exit      ^R Read File   ^\ Replace     ^U Paste     ^J Justify   ^/ Go To Line M-E Redo      M-6 Copy       ^Q Where Was    M-W Next
```

i-025f1d18f7c8a8cda (nagios-host)

PublicIPs: 3.86.198.73 PrivateIPs: 172.31.93.157

Step 6: Open Nagios config file and add the following line -
nano /usr/local/nagios/etc/nagios.cfg

Then add this line -
cfg_dir=/usr/local/nagios/etc/objects/monitorhosts/

```
GNU nano 5.8                    /usr/local/nagios/etc/nagios.cfg                    Modified
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/timeperiods.cfg
cfg_file=/usr/local/nagios/etc/objects/templates.cfg

# 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

# Definitions for monitoring a network printer
#cfg_file=/usr/local/nagios/etc/objects/printer.cfg


# You can also tell Nagios to process all config files (with a .cfg
# extension) in a particular directory by using the cfg_dir
# directive as shown below:

#cfg_dir=/usr/local/nagios/etc/servers
#cfg_dir=/usr/local/nagios/etc/printers
#cfg_dir=/usr/local/nagios/etc/switches
#cfg_dir=/usr/local/nagios/etc/routers

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

^G Help      ^O Write Out  ^W Where Is   ^K Cut       ^T Execute    ^C Location   M-U Undo      M-A Set Mark  M-] To Bracket M-Q Previous
^X Exit      ^R Read File  ^\ Replace    ^U Paste     ^J Justify    ^/ Go To Line M-E Redo      M-6 Copy      ^Q Where Was   M-W Next
```

i-025f1d18f7c8a8cda (nagios-host)

PublicIPs: 3.86.198.73 PrivateIPs: 172.31.93.157

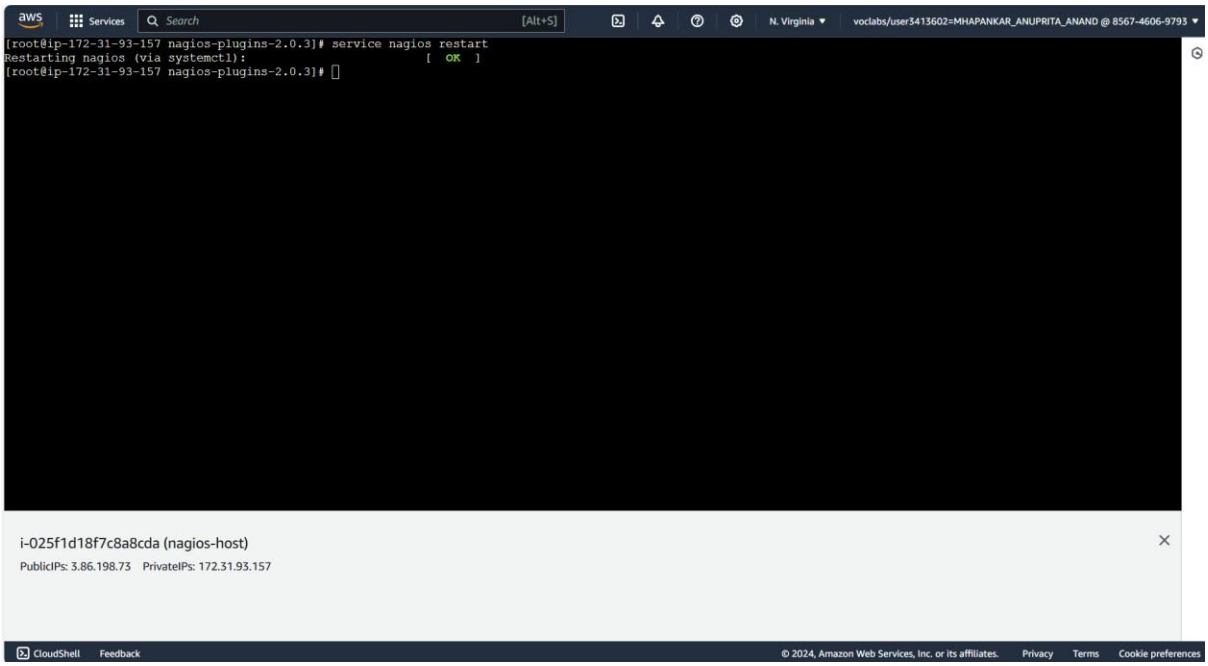
Step 8: Verify configuration files using the following command -
sudo /usr/local/nagios/bin/nagios -v /usr/local/nagios/etc/nagios.cfg

If there are no errors, run the following command -
sudo service nagios start

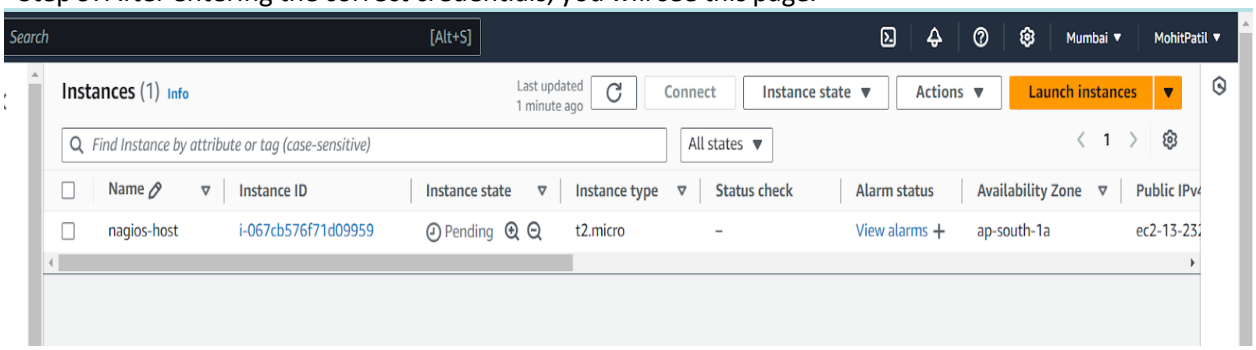
```
[root@ip-172-31-93-157 nagios-plugins-2.0.3]# nano /usr/local/nagios/etc/nagios.cfg
[root@ip-172-31-93-157 nagios-plugins-2.0.3]# nano /usr/local/nagios/etc/nagios.cfg
[root@ip-172-31-93-157 nagios-plugins-2.0.3]#  /usr/local/nagios/bin/nagios -v /usr/local/nagios/etc/nagios.cfg

Nagios Core 4.4.6
Copyright (c) 2009-present Nagios Core Development Team and Community Contributors
Copyright (c) 1999-2009 Ethan Galstad
Last Modified: 2020-04-28
License: GPL

Website: https://www.nagios.org
Reading configuration data...
   Read main config file okay...
WARNING: The normal_check_interval attribute is deprecated and will be removed in future versions. Please use check_interval instead.
WARNING: The retry_check_interval attribute is deprecated and will be removed in future versions. Please use retry_interval instead.
WARNING: The normal_check_interval attribute is deprecated and will be removed in future versions. Please use check_interval instead.
WARNING: The retry_check_interval attribute is deprecated and will be removed in future versions. Please use retry_interval instead.
Error: Could not find any host matching 'linuxserver' (config file '/usr/local/nagios/etc/objects/monitorhosts/linuxhosts/linuxserver.cfg', starting on line 45)
Error: Could not expand members specified in hostgroup (config file '/usr/local/nagios/etc/objects/monitorhosts/linuxhosts/linuxserver.cfg', starting on line 45)
   Error processing object config files!


***> One or more problems was encountered while processing the config files...

     Check your configuration file(s) to ensure that they contain valid
     directives and data definitions.  If you are upgrading from a previous
     version of Nagios, you should be aware that some variables/definitions
     may have been removed or modified in this version.  Make sure to read
     the HTML documentation regarding the config files, as well as the
     'Whats New' section to find out what has changed.

[root@ip-172-31-93-157 nagios-plugins-2.0.3]#
```

i-025f1d18f7c8a8cda (nagios-host)

PublicIPs: 3.86.198.73 PrivateIPs: 172.31.93.157



Step 9: After entering the correct credentials, you will see this page.



Not secure 3.86.198.73/nagios/

Nagios

General
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Current Network Status
Last Updated: Mon Sep 30 19:13:49 UTC 2024
Updated every 90 seconds
Nagios® Core™ 4.4.6 - www.nagios.org
Logged in as *nagiosadmin*

View Service Status Detail For All Host Groups
View Status Overview For All Host Groups
View Status Summary For All Host Groups
View Status Grid For All Host Groups

Host Status Totals

Up	Down	Unreachable	Pending
2	0	0	0

All Problems	All Types
0	2

Service Status Totals

Ok	Warning	Unknown	Critical	Pending
6	1	0	1	8

All Problems	All Types
2	16

Host Status Details For All Host Groups

Limit Results: 100

Host	Status	Last Check	Duration	Status Information
linuxserver	UP	09-30-2024 19:13:16	0d 0h 0m 33s+	PING OK - Packet loss = 0%, RTA = 1.82 ms
localhost	UP	09-30-2024 19:01:49	0d 1h 11m 22s	PING OK - Packet loss = 0%, RTA = 0.04 ms

Results 1 - 2 of 2 Matching Hosts

Page Tour