

Experiment 10

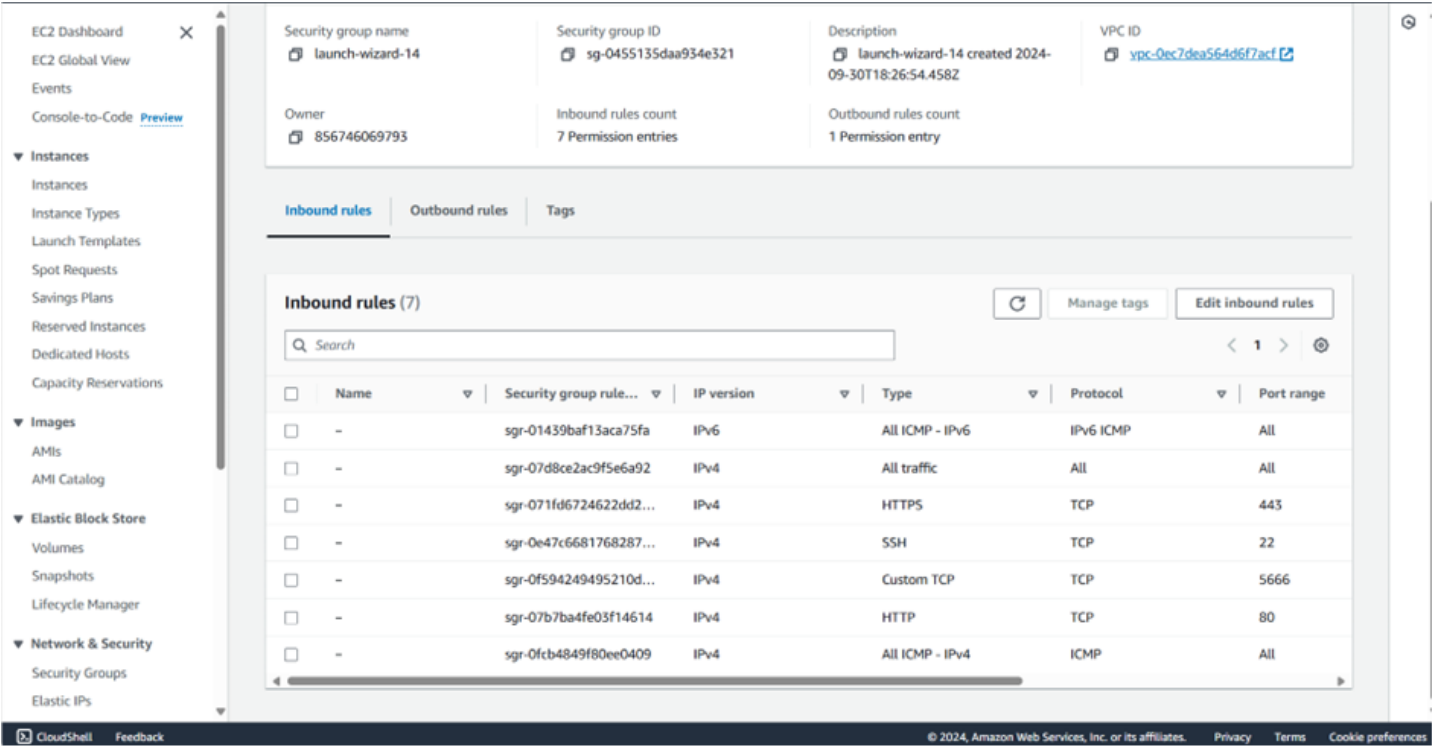
**Aim:** To perform Port, Service monitoring, Windows/Linux server monitoring using Nagios.

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.

```
[root@ip-172-31-93-157 nagios-plugins-2.0.3]# sudo systemctl status nagios
● nagios.service - LSB: Starts and stops the Nagios monitoring server
   Loaded: loaded (/etc/rc.d/init.d/nagios; generated)
   Active: active (running) since Mon 2024-09-30 18:02:27 UTC; 42s ago
     Docs: man:cylonsd-cvty-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
           └─30009 /usr/local/nagios/bin/nagios -d /usr/local/nagios/etc/nagios.cfg
             └─30011 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
               └─30012 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
                 └─30013 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
                   └─30014 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
                     └─30037 /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. Please
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. Please
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. Please
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. Please
Sep 30 18:02:27 ip-172-31-93-157.ec2.internal nagios[80009]: Successfully launched command file worker with pid 80037
lines 1-26/26 (END)
```

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. Please use the check_interval attribute instead.
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. Please use the retry_interval attribute instead.
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. Please use the check_interval attribute instead.
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. Please use the retry_interval attribute instead.
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]#

```

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
cp: missing destination file operand after '/usr/local/nagios/etc/objects/localhost.cfg'
Try 'cp --help' for more information.
bash: /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
bash: /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
cp: missing destination file operand after '/usr/local/nagios/etc/objects/monitorhosts/linuxhosts/linuxserver.cfg'
Try '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]#

```

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**



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]#
```

```
[root@ip-172-31-93-157 nagios-plugins-2.0.3]# service nagios restart
Restarting nagios (via systemctl):      [ OK ]
[root@ip-172-31-93-157 nagios-plugins-2.0.3]#
```

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

Nagios®

General

Home

Documentation

Current Status

Tactical Overview

Map (Legacy)

Hosts

Services

Host Groups

Summary

Grid

Service Groups

Summary

Grid

Problems

Services (Unhandled)

Hosts (Unhandled)

Network Outages

Quick Search:

Reports

Availability

Trends (Legacy)

Alerts

History

Summary

Histogram (Legacy)

Notifications

Event Log

System

Comments

Downtime

Process Info

Performance Info

Scheduling Queue

Configuration

Current Network Status

Last Updated: Mon Sep 30 19:13:49 UTC 2024

Updated every 30 seconds

Nagios® Core™ 4.4.6 - www.nagios.org

Logged in as: nagiosadmin

Host Status Totals

Up: 2, Down: 0, Unreachable: 0, Pending: 0

All Problems: 0, All Types: 2

Service Status Totals

Ok: 6, Warning: 1, Unknown: 0, Critical: 1, Pending: 0

All Problems: 2, All Types: 16

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 Details For All Host Groups

Limit Results: 100

Host	Status	Last Check	Duration	Status Information
brucserver	UP	09-30-2024 19:13:16	0d 0h 0m 23s+	PING OK - Packet loss = 0%, RTA = 1.62 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

**Conclusion:** Port, Service monitoring, Windows/Linux server monitoring using Nagios was performed.