

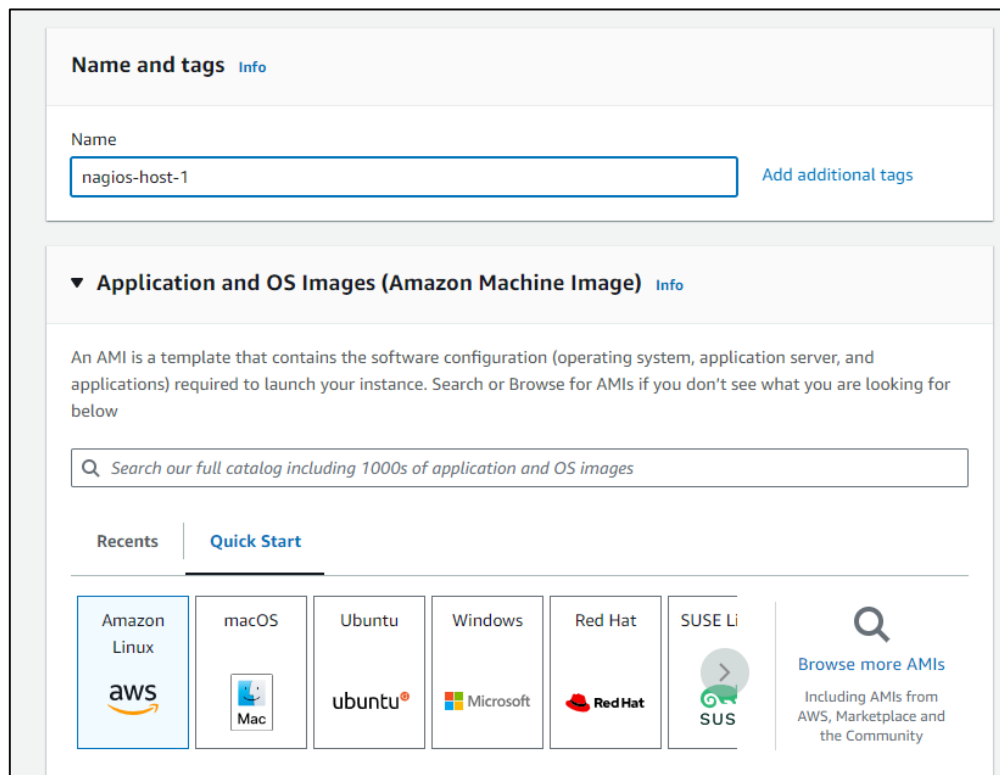
Advance DevOps

Experiment 9

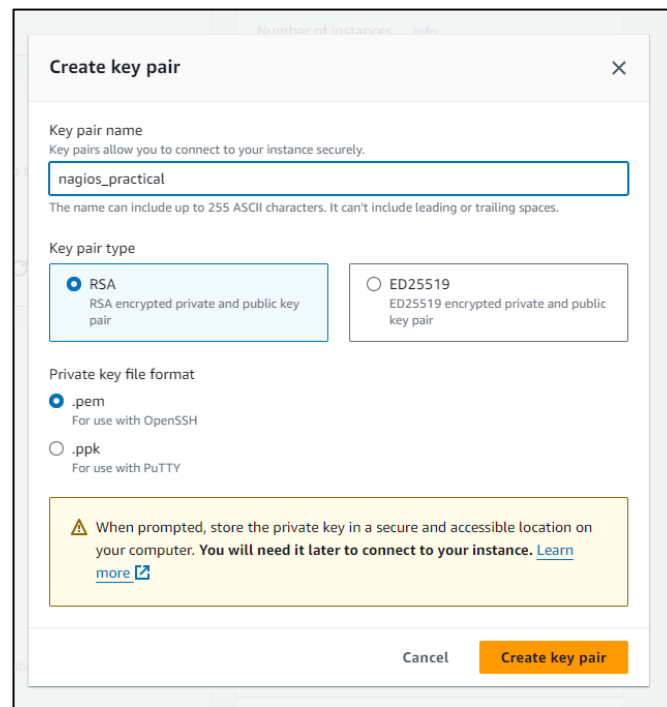
Aim: To understand continuous monitoring and installation and configuration of Nagios Core, Nagios Plugins and NRPE (Nagios Remote Plugin Executor) on Linux Machine.

Steps:

1. Create an ec2 instance and select amazon Linux as the OS

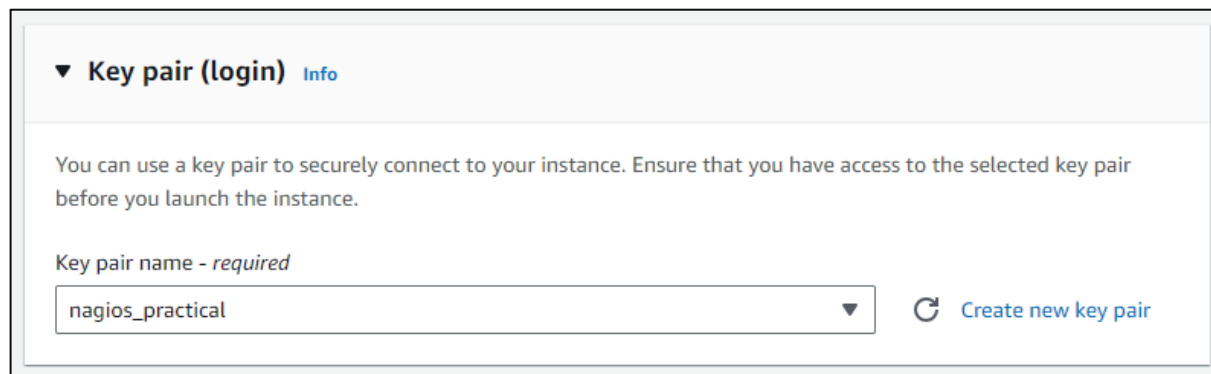


2. Now we will create a key pair.



The screenshot shows the 'Create key pair' dialog box. It has a title bar 'Create key pair' with a close button. The main content area includes: 'Key pair name' with a text input field containing 'nagios_practical' and a note that the name can include up to 255 ASCII characters; 'Key pair type' with two radio button options: 'RSA' (selected) and 'ED25519'; 'Private key file format' with two radio button options: '.pem' (selected) and '.ppk'. At the bottom, there are 'Cancel' and 'Create key pair' buttons. A warning box at the bottom states: 'When prompted, store the private key in a secure and accessible location on your computer. You will need it later to connect to your instance. Learn more'.

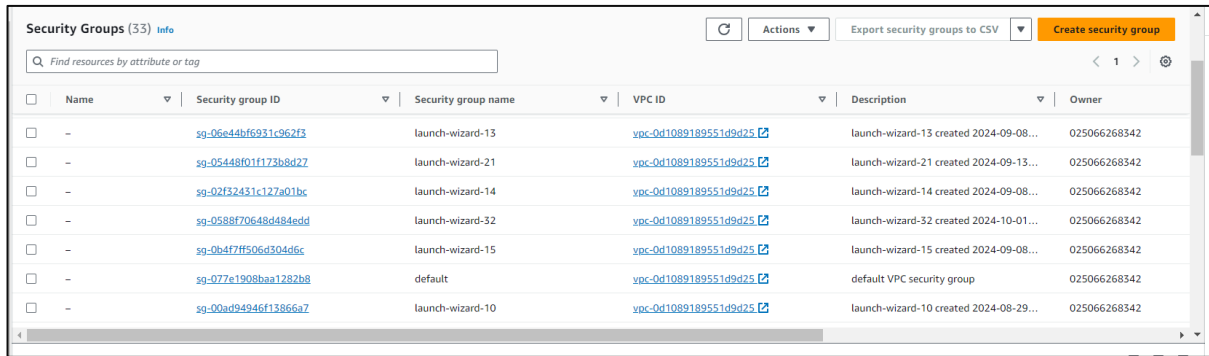
3. Use the created key pair while creating the instance



The screenshot shows the 'Key pair (login)' section. It has a title 'Key pair (login)' with an 'Info' link. Below the title, there is a text block: 'You can use a key pair to securely connect to your instance. Ensure that you have access to the selected key pair before you launch the instance.' Below this, there is a label 'Key pair name - required' and a dropdown menu showing 'nagios_practical'. To the right of the dropdown is a 'Create new key pair' button with a refresh icon.

4. Once the instance is successfully initiated go to security groups and select the security group id of the instance you just created.

(The security group name is visible during instance creation and also on the ec2 instances dashboard)

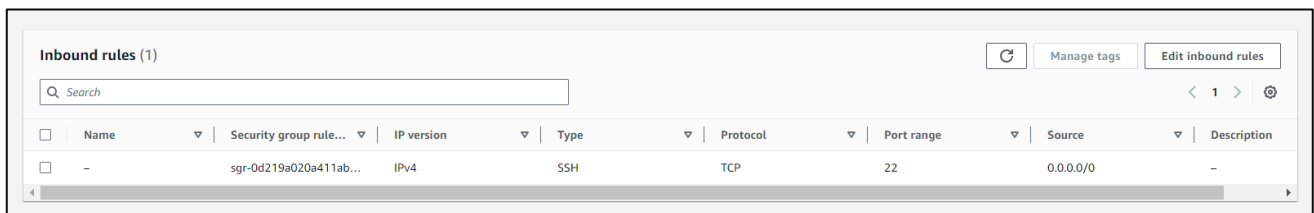


Security Groups (33) Info

Find resources by attribute or tag

<input type="checkbox"/>	Name	Security group ID	Security group name	VPC ID	Description	Owner
<input type="checkbox"/>	-	sg-06e4b6931c962f3	launch-wizard-13	vpc-0d1089189551d9d25	launch-wizard-13 created 2024-09-08...	025066268342
<input type="checkbox"/>	-	sg-05448f01f173b8d27	launch-wizard-21	vpc-0d1089189551d9d25	launch-wizard-21 created 2024-09-13...	025066268342
<input type="checkbox"/>	-	sg-02f32431c127a01bc	launch-wizard-14	vpc-0d1089189551d9d25	launch-wizard-14 created 2024-09-08...	025066268342
<input type="checkbox"/>	-	sg-0588f70648d484edd	launch-wizard-32	vpc-0d1089189551d9d25	launch-wizard-32 created 2024-10-01...	025066268342
<input type="checkbox"/>	-	sg-0b4f7ff906d304d6c	launch-wizard-15	vpc-0d1089189551d9d25	launch-wizard-15 created 2024-09-08...	025066268342
<input type="checkbox"/>	-	sg-077e1908baa1282b8	default	vpc-0d1089189551d9d25	default VPC security group	025066268342
<input type="checkbox"/>	-	sg-00ad94946f13866a7	launch-wizard-10	vpc-0d1089189551d9d25	launch-wizard-10 created 2024-08-29...	025066268342

5. To edit the inbound rules select the “Edit inbound rules” button

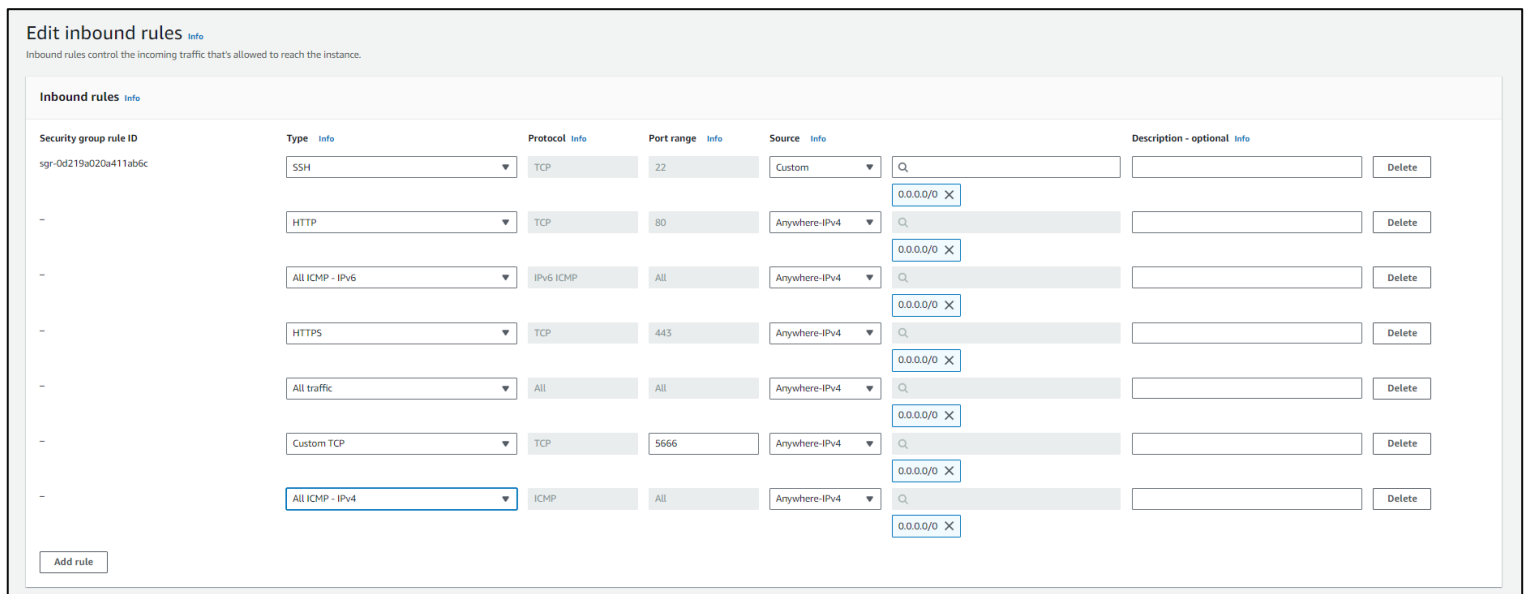


Inbound rules (1)

Search

<input type="checkbox"/>	Name	Security group rule...	IP version	Type	Protocol	Port range	Source	Description
<input type="checkbox"/>	-	sgr-0d219a020a411ab...	IPv4	SSH	TCP	22	0.0.0.0/0	-

6. Add the rules as given in the screenshot below



Edit inbound rules Info

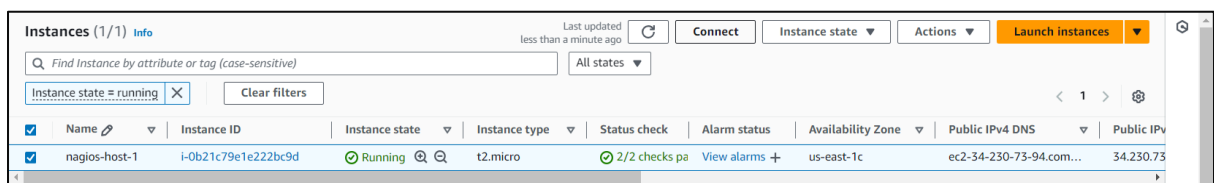
Inbound rules control the incoming traffic that's allowed to reach the instance.

Inbound rules Info

Security group rule ID	Type	Protocol	Port range	Source	Description - optional
sgr-0d219a020a411ab6c	SSH	TCP	22	Custom	
-	HTTP	TCP	80	Anywhere-IPv4	
-	All ICMP - IPv6	IPv6 ICMP	All	Anywhere-IPv4	
-	HTTPS	TCP	443	Anywhere-IPv4	
-	All traffic	All	All	Anywhere-IPv4	
-	Custom TCP	TCP	5666	Anywhere-IPv4	
-	All ICMP - IPv4	ICMP	All	Anywhere-IPv4	

Add rule

7. Connect the instance



Instances (1/1) Info

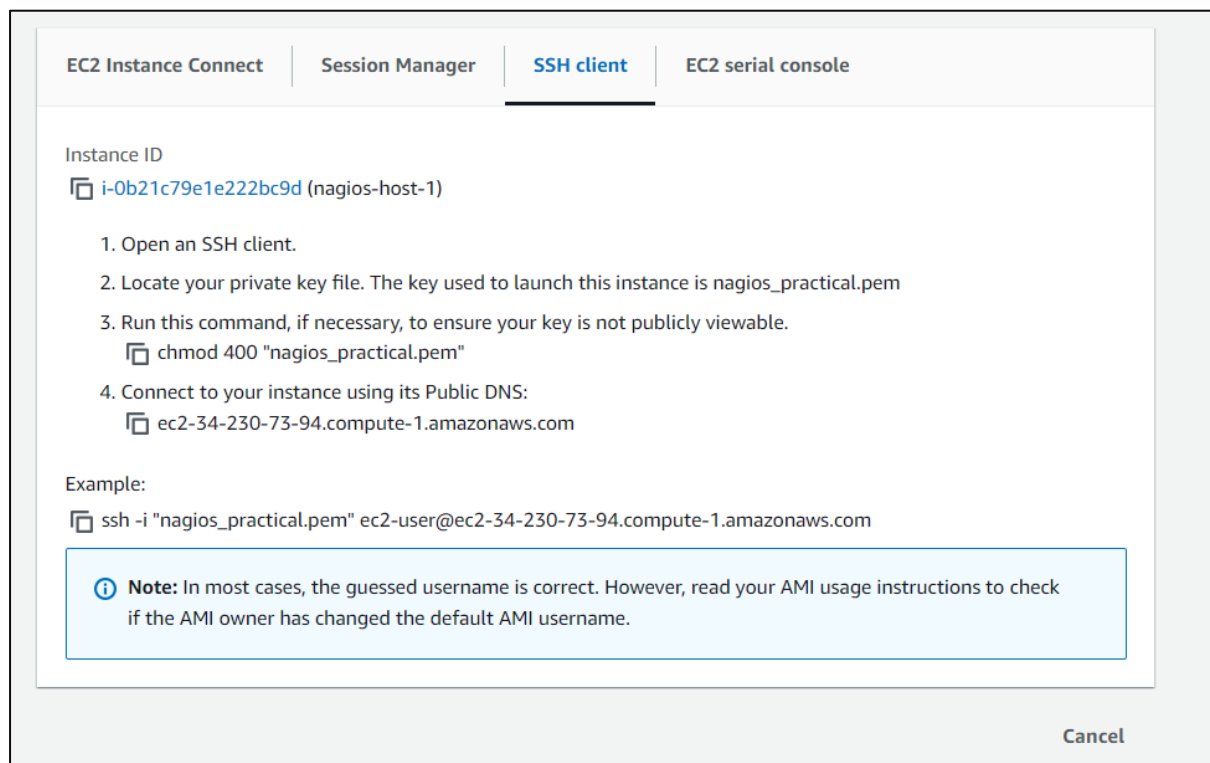
Last updated less than a minute ago

Find Instance by attribute or tag (case-sensitive)

Instance state = running Clear filters


<input checked="" type="checkbox"/>	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public IP
<input checked="" type="checkbox"/>	nagios-host-1	i-0b21c79e1e222bc9d	Running	t2.micro	2/2 checks pa	View alarms +	us-east-1c	ec2-34-230-73-94.com...	34.230.73

8. Copy the ssh command given in the ssh client section.



9. In your terminal paste the copied command, just replace the .pem file name with the actual location where the .pem file is downloaded in your system

```
C:\Users\Dell>ssh -i "C:\Users\Dell\Downloads\nagios-practical.pem" ec2-user@ec2-34-230-73-94.compute-1.amazonaws.com
The authenticity of host 'ec2-34-230-73-94.compute-1.amazonaws.com (34.230.73.94)' can't be established.
ED25519 key fingerprint is SHA256:05N86uRSMILGvSCS4gVzGHutkB+uAOHp4xAZI+rerA.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added 'ec2-34-230-73-94.compute-1.amazonaws.com' (ED25519) to the list of known hosts.
```



```
#
#####          Amazon Linux 2023
#####
#####|
#####|
#####| \#/\      https://aws.amazon.com/linux/amazon-linux-2023
##### V~ ~ ~ ~ ~
##### ~ ~ ~ ~ ~
##### ~ ~ ~ ~ ~
##### ~ ~ ~ ~ ~
##### ~ ~ ~ ~ ~
##### ~ ~ ~ ~ ~
```

```
Last login: Tue Oct  1 15:23:21 2024 from 18.206.107.27
[ec2-user@ip-172-31-87-75 ~]$ |
```

10. Now install the following packages using yum:

sudo yum update

```
[ec2-user@ip-172-31-87-75 ~]$ sudo yum update
Last metadata expiration check: 0:30:09 ago on Tue Oct 1 15:04:44 2024.
Dependencies resolved.
Nothing to do.
Complete!
```

sudo yum install httpd php

```
[ec2-user@ip-172-31-87-75 ~]$ sudo yum install httpd php
Last metadata expiration check: 0:31:22 ago on Tue Oct 1 15:04:44 2024.
Dependencies resolved.
=====
Package                        Architecture      Version           Repository        Size
=====
Installing:
httpd                          x86_64            2.4.62-1.amzn2023      amazonlinux        48 k
php8.3                         x86_64            8.3.10-1.amzn2023.0.1  amazonlinux        10 k
Installing dependencies:
apr                            x86_64            1.7.2-2.amzn2023.0.2   amazonlinux        129 k
apr-util                       x86_64            1.6.3-1.amzn2023.0.1   amazonlinux        98 k
generic-logos-httpd           noarch            18.0.0-12.amzn2023.0.3 amazonlinux        19 k
httpd-core                     x86_64            2.4.62-1.amzn2023      amazonlinux        1.4 M
httpd-filesystem               noarch            2.4.62-1.amzn2023      amazonlinux        14 k
httpd-tools                    x86_64            2.4.62-1.amzn2023      amazonlinux        81 k
libbrotli                      x86_64            1.0.9-4.amzn2023.0.2   amazonlinux        315 k
libsodium                      x86_64            1.0.19-4.amzn2023      amazonlinux        176 k
libxslt                        x86_64            1.1.34-5.amzn2023.0.2   amazonlinux        241 k
mailcap                         noarch            2.1.49-3.amzn2023.0.3   amazonlinux        33 k
nginx-filesystem               noarch            1:1.24.0-1.amzn2023.0.4 amazonlinux        9.8 k
php8.3-cli                     x86_64            8.3.10-1.amzn2023.0.1   amazonlinux        3.7 M
php8.3-common                  x86_64            8.3.10-1.amzn2023.0.1   amazonlinux        737 k
php8.3-process                 x86_64            8.3.10-1.amzn2023.0.1   amazonlinux        45 k
php8.3-xml                     x86_64            8.3.10-1.amzn2023.0.1   amazonlinux        154 k
Installing weak dependencies:
apr-util-openssl              x86_64            1.6.3-1.amzn2023.0.1   amazonlinux        17 k
mod_http2                     x86_64            2.0.27-1.amzn2023.0.3   amazonlinux        166 k
mod_lua                        x86_64            2.4.62-1.amzn2023      amazonlinux        61 k
php8.3-fpm                    x86_64            8.3.10-1.amzn2023.0.1   amazonlinux        1.9 M
php8.3-mbstring                x86_64            8.3.10-1.amzn2023.0.1   amazonlinux        528 k
php8.3-opcache                 x86_64            8.3.10-1.amzn2023.0.1   amazonlinux        379 k
php8.3-pdo                     x86_64            8.3.10-1.amzn2023.0.1   amazonlinux        89 k
php8.3-sodium                  x86_64            8.3.10-1.amzn2023.0.1   amazonlinux        41 k
Transaction Summary
=====
Install      13 Packages
```

```
Installed:
apr-1.7.2-2.amzn2023.0.2.x86_64          apr-util-1.6.3-1.amzn2023.0.1.x86_64          apr-util-openssl-1.6.3-1.amzn2023.0.1.x86_64
generic-logos-httpd-18.0.0-12.amzn2023.0.3.noarch  httpd-2.4.62-1.amzn2023.x86_64          httpd-core-2.4.62-1.amzn2023.x86_64
httpd-filesystem-2.4.62-1.amzn2023.noarch          httpd-tools-2.4.62-1.amzn2023.x86_64          libbrotli-1.0.9-4.amzn2023.0.2.x86_64
libsodium-1.0.19-4.amzn2023.x86_64                libxslt-1.1.34-5.amzn2023.0.2.x86_64          mailcap-2.1.49-3.amzn2023.0.3.noarch
mod_http2-2.0.27-1.amzn2023.0.3.x86_64            mod_lua-2.4.62-1.amzn2023.x86_64            nginx-filesystem-1:1.24.0-1.amzn2023.0.4.noarch
php8.3-8.3.10-1.amzn2023.0.1.x86_64              php8.3-cli-8.3.10-1.amzn2023.0.1.x86_64      php8.3-common-8.3.10-1.amzn2023.0.1.x86_64
php8.3-fpm-8.3.10-1.amzn2023.0.1.x86_64           php8.3-mbstring-8.3.10-1.amzn2023.0.1.x86_64  php8.3-opcache-8.3.10-1.amzn2023.0.1.x86_64
php8.3-pdo-8.3.10-1.amzn2023.0.1.x86_64           php8.3-process-8.3.10-1.amzn2023.0.1.x86_64  php8.3-sodium-8.3.10-1.amzn2023.0.1.x86_64
php8.3-xml-8.3.10-1.amzn2023.0.1.x86_64

Complete!
```

sudo yum install gcc glibc glibc-common

```
[ec2-user@ip-172-31-87-75 ~]$ sudo yum install gcc glibc glibc-common
Last metadata expiration check: 0:35:45 ago on Tue Oct 1 15:04:44 2024.
Package glibc-2.34-52.amzn2023.0.11.x86_64 is already installed.
Package glibc-common-2.34-52.amzn2023.0.11.x86_64 is already installed.
Dependencies resolved.
=====
Package                        Architecture      Version           Repository        Size
=====
Installing:
gcc                            x86_64            11.4.1-2.amzn2023.0.2   amazonlinux        32 M
Installing dependencies:
annobin-docs                   noarch            10.93-1.amzn2023.0.1     amazonlinux        92 k
annobin-plugin-gcc             x86_64            10.93-1.amzn2023.0.1     amazonlinux        887 k
cpp                             x86_64            11.4.1-2.amzn2023.0.2   amazonlinux        19 M
gc                               x86_64            8.0.4-5.amzn2023.0.2     amazonlinux        185 k
glibc-devel                     x86_64            2.34-52.amzn2023.0.11   amazonlinux        27 k
glibc-headers-x86              noarch            2.34-52.amzn2023.0.11   amazonlinux        427 k
guile22                         x86_64            2.2.7-2.amzn2023.0.3     amazonlinux        6.4 M
kernel-headers                 x86_64            6.1.109-118.189.amzn2023      amazonlinux        1.4 M
libmpc                         x86_64            1.2.1-2.amzn2023.0.2     amazonlinux        62 k
libtool-ltdl                   x86_64            2.4.7-1.amzn2023.0.3     amazonlinux        38 k
libxcrypt-devel                x86_64            4.4.33-7.amzn2023        amazonlinux        32 k
make                           x86_64            1:4.3-5.amzn2023.0.2     amazonlinux        534 k
Transaction Summary
=====
Install      13 Packages
```

```

Installed:
  annobin-docs-10.93-1.amzn2023.0.1.noarch      annobin-plugin-gcc-10.93-1.amzn2023.0.1.x86_64  cpp-11.4.1-2.amzn2023.0.2.x86_64
  gcc-8.0.4-5.amzn2023.0.2.x86_64               gcc-11.4.1-2.amzn2023.0.2.x86_64              glibc-devel-2.34-52.amzn2023.0.11.x86_64
  glibc-headers-x86-2.34-52.amzn2023.0.11.noarch  glibc-headers-6.1.109-118.189.amzn2023.x86_64  kernel-headers-6.1.109-118.189.amzn2023.x86_64
  libmpc-1.2.1-2.amzn2023.0.2.x86_64            libtool-ltdl-2.4.7-1.amzn2023.0.3.x86_64       libxcrypt-devel-4.4.33-7.amzn2023.x86_64
  make-1.4.3-5.amzn2023.0.2.x86_64

Complete!

```

sudo yum install gd gd-devel

```

[ec2-user@ip-172-31-87-75 ~]$ sudo yum install gd gd-devel
Last metadata expiration check: 0:38:32 ago on Tue Oct 1 15:04:44 2024.
Dependencies resolved.
=====
Package                               Architecture          Version                Repository              Size
=====
Installing:
gd                                     x86_64                2.3.3-5.amzn2023.0.3  amazonlinux             139 k
gd-devel                             x86_64                2.3.3-5.amzn2023.0.3  amazonlinux             38 k
Installing dependencies:
brotli                               x86_64                1.0.9-4.amzn2023.0.2  amazonlinux             314 k
brotli-devel                         x86_64                1.0.9-4.amzn2023.0.2  amazonlinux             31 k
bzip2-devel                          x86_64                1.0.8-6.amzn2023.0.2  amazonlinux             214 k
cairo                                 x86_64                1.17.6-2.amzn2023.0.1  amazonlinux             684 k
cmake-filesystem                    x86_64                3.22.2-1.amzn2023.0.4  amazonlinux             16 k
fontconfig                          x86_64                2.13.94-2.amzn2023.0.2  amazonlinux             273 k
fontconfig-devel                   x86_64                2.13.94-2.amzn2023.0.2  amazonlinux             128 k
fonts-filesystem                    noarch                1:2.0.5-12.amzn2023.0.2  amazonlinux             9.5 k
freetype                           x86_64                2.13.2-5.amzn2023.0.1  amazonlinux             423 k
freetype-devel                     x86_64                2.13.2-5.amzn2023.0.1  amazonlinux             912 k
glib2-devel                         x86_64                2.74.7-689.amzn2023.0.2  amazonlinux             486 k
google-noto-fonts-common            noarch                20201206-2.amzn2023.0.2  amazonlinux             15 k
google-noto-sans-vf-fonts           noarch                20201206-2.amzn2023.0.2  amazonlinux             492 k
graphite2                           x86_64                1.3.14-7.amzn2023.0.2  amazonlinux             97 k
graphite2-devel                     x86_64                1.3.14-7.amzn2023.0.2  amazonlinux             21 k
harfbuzz                            x86_64                7.0.0-2.amzn2023.0.1  amazonlinux             868 k
harfbuzz-devel                      x86_64                7.0.0-2.amzn2023.0.1  amazonlinux             404 k
harfbuzz-icu                        x86_64                7.0.0-2.amzn2023.0.1  amazonlinux             18 k
jbigkit-libs                        x86_64                2.1-21.amzn2023.0.2  amazonlinux             54 k
langpacks-core-font-en              noarch                3.0-21.amzn2023.0.4  amazonlinux             10 k
=====

```

```

Installed:
  brotli-1.0.9-4.amzn2023.0.2.x86_64          brotli-devel-1.0.9-4.amzn2023.0.2.x86_64
  bzip2-devel-1.0.8-6.amzn2023.0.2.x86_64     cairo-1.17.6-2.amzn2023.0.1.x86_64
  cmake-filesystem-3.22.2-1.amzn2023.0.4.x86_64  fontconfig-2.13.94-2.amzn2023.0.2.x86_64
  fontconfig-devel-2.13.94-2.amzn2023.0.2.x86_64  fonts-filesystem-1:2.0.5-12.amzn2023.0.2.noarch
  freetype-2.13.2-5.amzn2023.0.1.x86_64        freetype-devel-2.13.2-5.amzn2023.0.1.x86_64
  gd-2.3.3-5.amzn2023.0.3.x86_64               gd-devel-2.3.3-5.amzn2023.0.3.x86_64
  glib2-devel-2.74.7-689.amzn2023.0.2.x86_64  google-noto-fonts-common-20201206-2.amzn2023.0.2.noarch
  google-noto-sans-vf-fonts-20201206-2.amzn2023.0.2.noarch  graphite2-1.3.14-7.amzn2023.0.2.x86_64
  graphite2-devel-1.3.14-7.amzn2023.0.2.x86_64  harfbuzz-7.0.0-2.amzn2023.0.1.x86_64
  harfbuzz-devel-7.0.0-2.amzn2023.0.1.x86_64  harfbuzz-icu-7.0.0-2.amzn2023.0.1.x86_64
  jbigkit-libs-2.1-21.amzn2023.0.2.x86_64      langpacks-core-font-en-3.0-21.amzn2023.0.4.noarch
  libICE-1.0.10-6.amzn2023.0.2.x86_64         libSM-1.2.3-8.amzn2023.0.2.x86_64
  libX11-1.7.2-3.amzn2023.0.4.x86_64           libX11-common-1.7.2-3.amzn2023.0.4.noarch
  libX11-devel-1.7.2-3.amzn2023.0.4.x86_64     libX11-xcb-1.7.2-3.amzn2023.0.4.x86_64
  libXau-1.0.9-6.amzn2023.0.2.x86_64           libXau-devel-1.0.9-6.amzn2023.0.2.x86_64
  libXext-1.3.4-6.amzn2023.0.2.x86_64         libXpm-3.5.15-2.amzn2023.0.3.x86_64
  libXpm-devel-3.5.15-2.amzn2023.0.3.x86_64    libXrender-0.9.10-14.amzn2023.0.2.x86_64
  libXt-1.2.0-4.amzn2023.0.2.x86_64           libblkid-devel-2.37.4-1.amzn2023.0.4.x86_64
  libffi-devel-3.4.4-1.amzn2023.0.1.x86_64     libicu-67.1-7.amzn2023.0.3.x86_64
  libicu-devel-67.1-7.amzn2023.0.3.x86_64      libjpeg-turbo-devel-2.1.4-2.amzn2023.0.5.x86_64
  libjpeg-turbo-devel-2.1.4-2.amzn2023.0.5.x86_64  libpng-2.1.6.37-10.amzn2023.0.6.x86_64
  libpng-devel-2.1.6.37-10.amzn2023.0.6.x86_64  libselinux-devel-3.4-5.amzn2023.0.2.x86_64
  libselinux-devel-3.4-5.amzn2023.0.2.x86_64    libtiff-4.4.0-4.amzn2023.0.18.x86_64
  libtiff-devel-4.4.0-4.amzn2023.0.18.x86_64    libwebp-1.2.4-1.amzn2023.0.6.x86_64
  libwebp-devel-1.2.4-1.amzn2023.0.6.x86_64     libxcb-1.13.1-7.amzn2023.0.2.x86_64
  libxcb-devel-1.13.1-7.amzn2023.0.2.x86_64     libxml2-devel-2.10.4-1.amzn2023.0.6.x86_64
  libxml2-devel-2.10.4-1.amzn2023.0.6.x86_64    pcre2-utf16-10.40-1.amzn2023.0.3.x86_64
  pcre2-utf32-10.40-1.amzn2023.0.3.x86_64      pcre2-devel-10.40-1.amzn2023.0.3.x86_64
  pixman-0.40.0-3.amzn2023.0.3.x86_64          pcre2-utf32-10.40-1.amzn2023.0.3.x86_64
  xml-common-0.6.3-56.amzn2023.0.2.noarch       sysprof-capture-devel-3.40.1-2.amzn2023.0.2.x86_64
  xz-devel-5.2.5-9.amzn2023.0.2.x86_64         xorg-x11-proto-devel-2021.4-1.amzn2023.0.2.noarch
  zlib-devel-1.2.11-33.amzn2023.0.5.x86_64     zlib-devel-1.2.11-33.amzn2023.0.5.x86_64

```

```

Complete!
[ec2-user@ip-172-31-87-75 ~]$ |

```

11. Create a new Nagios User with its password using the below given commands.

```

sudo adduser -m nagios
sudo passwd nagios

```

```

[ec2-user@ip-172-31-87-75 ~]$ sudo adduser -m nagios
sudo passwd nagios
Changing password for user nagios.
New password:
Retype new password:
passwd: all authentication tokens updated successfully.
[ec2-user@ip-172-31-87-75 ~]$ |

```

12. Create a new user group

```
sudo groupadd nagcmd
```

```
[ec2-user@ip-172-31-87-75 ~]$ sudo groupadd nagcmd  
[ec2-user@ip-172-31-87-75 ~]$ |
```

13. Next execute these commands so that you don't have to use sudo for Apache and Nagios:

```
sudo usermod -a -G nagcmd nagios
```

```
sudo usermod -a -G nagcmd apache
```

```
[ec2-user@ip-172-31-87-75 ~]$ sudo usermod -a -G nagcmd nagios  
sudo usermod -a -G nagcmd apache  
[ec2-user@ip-172-31-87-75 ~]$ |
```

14. Create a new directory for Nagios downloads

```
mkdir ~/downloads
```

```
cd ~/downloads
```

```
[ec2-user@ip-172-31-87-75 ~]$ mkdir ~/downloads  
cd ~/downloads  
[ec2-user@ip-172-31-87-75 downloads]$ |
```

15. Use wget to download the source zip files.

```
wget https://assets.nagios.com/downloads/nagioscore/releases/nagios-4.5.5.tar.gz
```

```
[ec2-user@ip-172-31-87-75 downloads]$ wget https://assets.nagios.com/downloads/nagioscore/releases/nagios-4.5.5.tar.gz  
--2024-10-01 15:55:47-- https://assets.nagios.com/downloads/nagioscore/releases/nagios-4.5.5.tar.gz  
Resolving assets.nagios.com (assets.nagios.com)... 45.79.49.120, 2600:3c00::f03c:92ff:fe77:45ce  
Connecting to assets.nagios.com (assets.nagios.com)|45.79.49.120|:443... connected.  
HTTP request sent, awaiting response... 200 OK  
Length: 2065473 (2.0M) [application/x-gzip]  
Saving to: 'nagios-4.5.5.tar.gz'  
  
nagios-4.5.5.tar.gz          100%[=====] 1.97M  5.54MB/s  in 0.4s  
  
2024-10-01 15:55:47 (5.54 MB/s) - 'nagios-4.5.5.tar.gz' saved [2065473/2065473]  
[ec2-user@ip-172-31-87-75 downloads]$ |
```

wget https://nagios-plugins.org/download/nagios-plugins-2.4.11.tar.gz

```
[ec2-user@ip-172-31-87-75 downloads]$ wget https://nagios-plugins.org/download/nagios-plugins-2.4.11.tar.gz
--2024-10-01 15:57:19-- https://nagios-plugins.org/download/nagios-plugins-2.4.11.tar.gz
Resolving nagios-plugins.org (nagios-plugins.org)... 45.56.123.251
Connecting to nagios-plugins.org (nagios-plugins.org)|45.56.123.251|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 2753049 (2.6M) [application/x-gzip]
Saving to: 'nagios-plugins-2.4.11.tar.gz'

nagios-plugins-2.4.11.tar.gz      100%[=====] 2.62M  4.14MB/s  in 0.6s
2024-10-01 15:57:20 (4.14 MB/s) - 'nagios-plugins-2.4.11.tar.gz' saved [2753049/2753049]
```

16. Use tar to unzip and change to that directory.

tar zxvf nagios-4.5.5.tar.gz

```
[ec2-user@ip-172-31-87-75 downloads]$ tar zxvf nagios-4.5.5.tar.gz
nagios-4.5.5/
nagios-4.5.5/.github/
nagios-4.5.5/.github/workflows/
nagios-4.5.5/.github/workflows/test.yml
nagios-4.5.5/.gitignore
nagios-4.5.5/CONTRIBUTING.md
nagios-4.5.5/ChangeLog
nagios-4.5.5/INSTALLING
nagios-4.5.5/LEGAL
nagios-4.5.5/LICENSE
nagios-4.5.5/Makefile.in
nagios-4.5.5/README.md
nagios-4.5.5/THANKS
nagios-4.5.5/UPGRADING
nagios-4.5.5/aclocal.m4
nagios-4.5.5/autoconf-macros/
nagios-4.5.5/autoconf-macros/.gitignore
nagios-4.5.5/autoconf-macros/CHANGELOG.md
nagios-4.5.5/autoconf-macros/LICENSE
nagios-4.5.5/autoconf-macros/LICENSE.md
nagios-4.5.5/autoconf-macros/README.md
nagios-4.5.5/autoconf-macros/add_group_user
nagios-4.5.5/autoconf-macros/ax_nagios_get_distrib
nagios-4.5.5/autoconf-macros/ax_nagios_get_files
```

17. We have to now change the directory to nagios-4.5.5, for this first verify whether nagios-4.5.5 exists by using ls command.

```
[ec2-user@ip-172-31-87-75 downloads]$ ls
nagios-4.5.5  nagios-4.5.5.tar.gz  nagios-plugins-2.4.11.tar.gz
```

18. As nagios-4.5.5 is present we will now use cd command to change directory.

```
[ec2-user@ip-172-31-87-75 downloads]$ cd nagios-4.5.5
[ec2-user@ip-172-31-87-75 nagios-4.5.5]$ |
```

19. Now we will install openssl dev library by using the command:
sudo yum install openssl-devel


```

Transaction Summary
=====
Install 1 Package

Total download size: 3.0 M
Installed size: 4.7 M
Is this ok [y/N]: y
Downloading Packages:
openssl-devel-3.0.8-1.amzn2023.0.14.x86_64.rpm                23 MB/s | 3.0 MB    00:00
-----
Total                                                         18 MB/s | 3.0 MB    00:00
Running transaction check
Transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
  Preparing                :                                1/1
  Installing               : openssl-devel-1:3.0.8-1.amzn2023.0.14.x86_64 1/1
  Running scriptlet: openssl-devel-1:3.0.8-1.amzn2023.0.14.x86_64 1/1
  Verifying               : openssl-devel-1:3.0.8-1.amzn2023.0.14.x86_64 1/1

Installed:
  openssl-devel-1:3.0.8-1.amzn2023.0.14.x86_64

```

20. Run the configuration script

`./configure --with-command-group=nagcmd`

```

[ec2-user@ip-172-31-87-75 nagios-4.5.5]$ ./configure --with-command-group=nagcmd
checking for a BSD-compatible install... /usr/bin/install -c
checking build system type... x86_64-pc-linux-gnu
checking host system type... x86_64-pc-linux-gnu
checking for gcc... gcc
checking whether the C compiler works... yes
checking for C compiler default output file name... a.out
checking for suffix of executables...
checking whether we are cross compiling... no
checking for suffix of object files... o
checking whether the compiler supports GNU C... yes
checking whether gcc accepts -g... yes
checking for gcc option to enable C11 features... none needed
checking whether make sets $(MAKE)... yes
checking whether ln -s works... yes
checking for strip... /usr/bin/strip
checking for sys/wait.h that is POSIX.1 compatible... yes
checking for stdio.h... yes
checking for stdlib.h... yes
checking for string.h... yes

```

*** Configuration summary for nagios 4.5.5 2024-09-17 ***:

General Options:

```

-----
Nagios executable: nagios
Nagios user/group: nagios,nagios
Command user/group: nagios,nagcmd
Event Broker: yes
Install ${prefix}: /usr/local/nagios
Install ${includedir}: /usr/local/nagios/include/nagios
Lock file: /run/nagios.lock
Check result directory: /usr/local/nagios/var/spool/checkresults
Init directory: /lib/systemd/system
Apache conf.d directory: /etc/httpd/conf.d
Mail program: /bin/mail
Host OS: linux-gnu
IOBroker Method: epoll

```

Web Interface Options:

```

-----
HTML URL: http://localhost/nagios/
CGI URL: http://localhost/nagios/cgi-bin/
Traceroute (used by WAP): /usr/bin/traceroute

```

Review the options above for accuracy. If they look okay, type 'make all' to compile the main program and CGIs.

21. To compile the source code run “make all”

```
[ec2-user@ip-172-31-87-75 nagios-4.5.5]$ make all
cd ./base && make
make[1]: Entering directory '/home/ec2-user/downloads/nagios-4.5.5/base'
gcc -Wall -I.. -I.. -I../lib -I../include -I../include -I.. -g -O2 -DHAVE_CONFIG_H -DNSCORE -c -o nagios.o ./nagios.c
gcc -Wall -I.. -I.. -I../lib -I../include -I../include -I.. -g -O2 -DHAVE_CONFIG_H -DNSCORE -c -o broker.o broker.c
gcc -Wall -I.. -I.. -I../lib -I../include -I../include -I.. -g -O2 -DHAVE_CONFIG_H -DNSCORE -c -o nebmodes.o nebmodes.c
gcc -Wall -I.. -I.. -I../lib -I../include -I../include -I.. -g -O2 -DHAVE_CONFIG_H -DNSCORE -c -o ../common/shared.o ../common/shared.c
gcc -Wall -I.. -I.. -I../lib -I../include -I../include -I.. -g -O2 -DHAVE_CONFIG_H -DNSCORE -c -o query-handler.o query-handler.c
gcc -Wall -I.. -I.. -I../lib -I../include -I../include -I.. -g -O2 -DHAVE_CONFIG_H -DNSCORE -c -o workers.o workers.c
In function 'get_wproc_list',
    inlined from 'get_workers' at workers.c:277:12:
workers.c:253:17: warning: '%s' directive argument is null [-Wformat-overflow=]
253 |         log_debug_info(DEBUG_CHECKS, 1, "Found specialized worker(s) for '%s'", (slash && *slash != '/') ? slash : cmd_name);
    |         ~~~~~^~~~~~
    |         ^~~~~~
    |         ^~~~~~
gcc -Wall -I.. -I.. -I../lib -I../include -I../include -I.. -g -O2 -DHAVE_CONFIG_H -DNSCORE -c -o checks.o checks.c
gcc -Wall -I.. -I.. -I../lib -I../include -I../include -I.. -g -O2 -DHAVE_CONFIG_H -DNSCORE -c -o config.o config.c
gcc -Wall -I.. -I.. -I../lib -I../include -I../include -I.. -g -O2 -DHAVE_CONFIG_H -DNSCORE -c -o commands.o commands.c
gcc -Wall -I.. -I.. -I../lib -I../include -I../include -I.. -g -O2 -DHAVE_CONFIG_H -DNSCORE -c -o events.o events.c
gcc -Wall -I.. -I.. -I../lib -I../include -I../include -I.. -g -O2 -DHAVE_CONFIG_H -DNSCORE -c -o flapping.o flapping.c
gcc -Wall -I.. -I.. -I../lib -I../include -I../include -I.. -g -O2 -DHAVE_CONFIG_H -DNSCORE -c -o logging.o logging.c
gcc -Wall -I.. -I.. -I../lib -I../include -I../include -I.. -g -O2 -DHAVE_CONFIG_H -DNSCORE -c -o macros-base.o ../common/macros.c
gcc -Wall -I.. -I.. -I../lib -I../include -I../include -I.. -g -O2 -DHAVE_CONFIG_H -DNSCORE -c -o netutils.o netutils.c
gcc -Wall -I.. -I.. -I../lib -I../include -I../include -I.. -g -O2 -DHAVE_CONFIG_H -DNSCORE -c -o notifications.o notifications.c
gcc -Wall -I.. -I.. -I../lib -I../include -I../include -I.. -g -O2 -DHAVE_CONFIG_H -DNSCORE -c -o sehandlers.o sehandlers.c
gcc -Wall -I.. -I.. -I../lib -I../include -I../include -I.. -g -O2 -DHAVE_CONFIG_H -DNSCORE -c -o utils.o utils.c
gcc -Wall -I.. -I.. -I../lib -I../include -I../include -I.. -g -O2 -DHAVE_CONFIG_H -DNSCORE -c -o retention-base.o ./sretention.c
gcc -Wall -I.. -I.. -I../lib -I../include -I../include -I.. -g -O2 -DHAVE_CONFIG_H -DNSCORE -c -o xretention-base.o ../xdata/xrddefault.c
gcc -Wall -I.. -I.. -I../lib -I../include -I../include -I.. -g -O2 -DHAVE_CONFIG_H -DNSCORE -c -o comments-base.o ../common/comments.c
```

22. To install binaries, init script and sample config files run

sudo make install

sudo make install-init

sudo make install-config

sudo make install-commandmode

```
[ec2-user@ip-172-31-87-75 nagios-4.5.5]$ sudo make install
sudo make install-init
sudo make install-config
sudo make install-commandmode
cd ./base && make install
make[1]: Entering directory '/home/ec2-user/downloads/nagios-4.5.5/base'
/usr/bin/install -c -m 775 -o nagios -g nagios -d /usr/local/nagios/bin
/usr/bin/install -c -s -m 774 -o nagios -g nagios nagios /usr/local/nagios/bin
/usr/bin/install -c -s -m 774 -o nagios -g nagios nagiosstats /usr/local/nagios/bin
make[1]: Leaving directory '/home/ec2-user/downloads/nagios-4.5.5/base'
cd ./cgi && make install
make[1]: Entering directory '/home/ec2-user/downloads/nagios-4.5.5/cgi'
make install-basic
make[2]: Entering directory '/home/ec2-user/downloads/nagios-4.5.5/cgi'
/usr/bin/install -c -m 775 -o nagios -g nagios -d /usr/local/nagios/sbin
for file in *.cgi; do \
    /usr/bin/install -c -s -m 775 -o nagios -g nagios $file /usr/local/nagios/sbin; \
done
make[2]: Leaving directory '/home/ec2-user/downloads/nagios-4.5.5/cgi'
make[1]: Leaving directory '/home/ec2-user/downloads/nagios-4.5.5/cgi'
cd ./html && make install
make[1]: Entering directory '/home/ec2-user/downloads/nagios-4.5.5/html'
/usr/bin/install -c -m 775 -o nagios -g nagios -d /usr/local/nagios/share
/usr/bin/install -c -m 775 -o nagios -g nagios -d /usr/local/nagios/share/media
/usr/bin/install -c -m 775 -o nagios -g nagios -d /usr/local/nagios/share/stylesheets
/usr/bin/install -c -m 775 -o nagios -g nagios -d /usr/local/nagios/share/contexthelp
/usr/bin/install -c -m 775 -o nagios -g nagios -d /usr/local/nagios/share/docs
/usr/bin/install -c -m 775 -o nagios -g nagios -d /usr/local/nagios/share/docs/images
/usr/bin/install -c -m 775 -o nagios -g nagios -d /usr/local/nagios/share/js
/usr/bin/install -c -m 775 -o nagios -g nagios -d /usr/local/nagios/share/images
/usr/bin/install -c -m 775 -o nagios -g nagios -d /usr/local/nagios/share/images/logos
/usr/bin/install -c -m 775 -o nagios -g nagios -d /usr/local/nagios/share/includes
/usr/bin/install -c -m 775 -o nagios -g nagios -d /usr/local/nagios/share/ssi
/usr/bin/install -c -m 664 -o nagios -g nagios ./robots.txt /usr/local/nagios/share
/usr/bin/install -c -m 664 -o nagios -g nagios ./jquery.html /usr/local/nagios/share
rm -f /usr/local/nagios/share/index.html
rm -f /usr/local/nagios/share/main.html
rm -f /usr/local/nagios/share/side.html
```

23. In the config file edit the email address

```
sudo nano /usr/local/nagios/etc/objects/contacts.cfg
```

```
#####  
#  
# CONTACTS  
#  
#####  
  
# Just one contact defined by default - the Nagios admin (that's you)  
# This contact definition inherits a lot of default values from the  
# 'generic-contact' template which is defined elsewhere.  
  
define contact {  
    contact_name    nagiosadmin        ; Short name of user  
    use              generic-contact    ; Inherit default values from generic-contact template (defined above)  
    alias            Nagios Admin       ; Full name of user  
    email            d2022.nayaab.jindani@ves.ac.in ; <***** CHANGE THIS TO YOUR EMAIL ADDRESS *****  
}
```

24. To configure the web interface run:

```
sudo make install-webconf
```

```
[ec2-user@ip-172-31-87-75 nagios-4.5.5]$ sudo make install-webconf  
/usr/bin/install -c -m 644 sample-config/httpd.conf /etc/httpd/conf.d/nagios.conf  
if [ 0 -eq 1 ]; then \  
    ln -s /etc/httpd/conf.d/nagios.conf /etc/apache2/sites-enabled/nagios.conf; \  
fi  
  
*** Nagios/Apache conf file installed ***  
[ec2-user@ip-172-31-87-75 nagios-4.5.5]$ |
```

25. Create a nagios admin account and password

```
sudo htpasswd -c /usr/local/nagios/etc/htpasswd.users nagiosadmin
```

```
[ec2-user@ip-172-31-87-75 nagios-4.5.5]$ sudo htpasswd -c /usr/local/nagios/etc/htpasswd.users nagiosadmin  
New password:  
Re-type new password:  
Adding password for user nagiosadmin
```

26. Restart apache

```
sudo service httpd restart
```

```
[ec2-user@ip-172-31-87-75 nagios-4.5.5]$ sudo service httpd restart  
Redirecting to /bin/systemctl restart httpd.service  
[ec2-user@ip-172-31-87-75 nagios-4.5.5]$ |
```

27. Go back to the downloads folder by using “cd ~/downloads” and unzip the plugins zip file using

```
tar zxvf nagios-plugins-2.4.11.tar.gz
```

```
[ec2-user@ip-172-31-87-75 nagios-4.5.5]$ cd ~/downloads
tar zxvf nagios-plugins-2.4.11.tar.gz
nagios-plugins-2.4.11/
nagios-plugins-2.4.11/build-aux/
nagios-plugins-2.4.11/build-aux/compile
nagios-plugins-2.4.11/build-aux/config.guess
nagios-plugins-2.4.11/build-aux/config.rpath
nagios-plugins-2.4.11/build-aux/config.sub
nagios-plugins-2.4.11/build-aux/install-sh
nagios-plugins-2.4.11/build-aux/ltmain.sh
nagios-plugins-2.4.11/build-aux/missing
nagios-plugins-2.4.11/build-aux/mkinstalldirs
nagios-plugins-2.4.11/build-aux/depcomp
nagios-plugins-2.4.11/build-aux/snippet/
nagios-plugins-2.4.11/build-aux/snippet/_Noreturn.h
nagios-plugins-2.4.11/build-aux/snippet/arg-nonnull.h
nagios-plugins-2.4.11/build-aux/snippet/c++defs.h
nagios-plugins-2.4.11/build-aux/snippet/warn-on-use.h
nagios-plugins-2.4.11/build-aux/test-driver
nagios-plugins-2.4.11/config_test/
nagios-plugins-2.4.11/config_test/Makefile
nagios-plugins-2.4.11/config_test/run_tests
nagios-plugins-2.4.11/config_test/child_test.c
nagios-plugins-2.4.11/gl/
```

28. Compile and install the plugins

```
cd nagios-plugins-2.0.3
```

```
./configure --with-nagios-user=nagios --with-nagios-group=nagios
```

```
[ec2-user@ip-172-31-87-75 downloads]$ cd nagios-plugins-2.4.11
./configure --with-nagios-user=nagios --with-nagios-group=nagios
checking for a BSD-compatible install... /usr/bin/install -c
checking whether build environment is sane... yes
checking for a thread-safe mkdir -p... /usr/bin/mkdir -p
checking for gawk... gawk
checking whether make sets $(MAKE)... yes
checking whether make supports nested variables... yes
checking whether to enable maintainer-specific portions of Makefiles... yes
checking build system type... x86_64-pc-linux-gnu
checking host system type... x86_64-pc-linux-gnu
checking for gcc... gcc
checking whether the C compiler works... yes
checking for C compiler default output file name... a.out
checking for suffix of executables...
checking whether we are cross compiling... no
checking for suffix of object files... o
checking whether we are using the GNU C compiler... yes
checking whether gcc accepts -g... yes
```

make

sudo make install

```
[ec2-user@ip-172-31-87-75 nagios-plugins-2.4.11]$ sudo make install
Making install in gl
make[1]: Entering directory '/home/ec2-user/downloads/nagios-plugins-2.4.11/gl'
make install-recursive
make[2]: Entering directory '/home/ec2-user/downloads/nagios-plugins-2.4.11/gl'
make[3]: Entering directory '/home/ec2-user/downloads/nagios-plugins-2.4.11/gl'
make[4]: Entering directory '/home/ec2-user/downloads/nagios-plugins-2.4.11/gl'
if test yes = no; then \
  case 'linux-gnu' in \
    darwin[56]*) \
      need_charset_alias=true ;; \
    darwin* | cygwin* | mingw* | pw32* | cegcc*) \
      need_charset_alias=false ;; \
    *) \
      need_charset_alias=true ;; \
  esac ; \
else \
  need_charset_alias=false ; \
fi ; \
if $need_charset_alias; then \
  /bin/sh ../build-aux/mkinstalldirs /usr/local/nagios/lib ; \
fi ; \
if test -f /usr/local/nagios/lib/charset.alias; then \
  sed -f ref-add.sed /usr/local/nagios/lib/charset.alias > /usr/local/nagios/lib/charset.tmp ; \
  /usr/bin/install -c -o nagios -g nagios -m 644 /usr/local/nagios/lib/charset.tmp /usr/local/nagios/lib/charset.alias ; \
  rm -f /usr/local/nagios/lib/charset.tmp ; \
else \
  if $need_charset_alias; then \
    sed -f ref-add.sed charset.alias > /usr/local/nagios/lib/charset.tmp ; \
    /usr/bin/install -c -o nagios -g nagios -m 644 /usr/local/nagios/lib/charset.tmp /usr/local/nagios/lib/charset.alias ; \
```

29. Run below given commands to start nagios:

sudo chkconfig --add nagios

sudo chkconfig nagios on

```
[ec2-user@ip-172-31-87-75 nagios-plugins-2.4.11]$ sudo chkconfig --add nagios
sudo chkconfig nagios on
error reading information on service nagios: No such file or directory
Note: Forwarding request to 'systemctl enable nagios.service'.
Created symlink /etc/systemd/system/multi-user.target.wants/nagios.service → /usr/lib/systemd/system/nagios.service.
```

sudo /usr/local/nagios/bin/nagios -v /usr/local/nagios/etc/nagios.cfg

```
[ec2-user@ip-172-31-87-75 nagios-plugins-2.4.11]$ sudo /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...
  Read object config files okay...

Running pre-flight check on configuration data...

Checking objects...
  Checked 8 services.
  Checked 1 hosts.
  Checked 1 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 1 hosts
  Checked 0 service dependencies
  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
[ec2-user@ip-172-31-87-75 nagios-plugins-2.4.11]$
```

If the message says no errors detected then run “sudo service nagios start”

```
[ec2-user@ip-172-31-87-75 nagios-plugins-2.4.11]$ sudo service nagios start
Redirecting to /bin/systemctl start nagios.service
[ec2-user@ip-172-31-87-75 nagios-plugins-2.4.11]$ |
```

sudo systemctl status nagios

```
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
[ec2-user@ip-172-31-87-75 nagios-plugins-2.4.11]$ sudo service nagios start
Redirecting to /bin/systemctl start nagios.service
[ec2-user@ip-172-31-87-75 nagios-plugins-2.4.11]$ 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 Tue 2024-10-01 16:32:27 UTC; 48s ago
     Docs: https://www.nagios.org/documentation
   Process: 66684 ExecStartPre=/usr/local/nagios/bin/nagios -v /usr/local/nagios/etc/nagios.cfg (code=exited, status=0/SUCCESS)
   Process: 66693 ExecStart=/usr/local/nagios/bin/nagios -d /usr/local/nagios/etc/nagios.cfg (code=exited, status=0/SUCCESS)
   Main PID: 66694 (nagios)
     Tasks: 6 (limit: 1112)
    Memory: 5.7M
       CPU: 82ms
   CGroup: /system.slice/nagios.service
           └─66694 /usr/local/nagios/bin/nagios -d /usr/local/nagios/etc/nagios.cfg
             └─66695 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
               └─66696 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
                 └─66697 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
                   └─66698 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
                     └─66739 /usr/local/nagios/bin/nagios -d /usr/local/nagios/etc/nagios.cfg

Oct 01 16:32:27 ip-172-31-87-75.ec2.internal nagios[66694]: qh: Socket '/usr/local/nagios/var/rw/nagios.qh' successfully initialized
Oct 01 16:32:27 ip-172-31-87-75.ec2.internal nagios[66694]: qh: core query handler registered
Oct 01 16:32:27 ip-172-31-87-75.ec2.internal nagios[66694]: qh: echo service query handler registered
Oct 01 16:32:27 ip-172-31-87-75.ec2.internal nagios[66694]: qh: help for the query handler registered
Oct 01 16:32:27 ip-172-31-87-75.ec2.internal nagios[66694]: wproc: Successfully registered manager as @wproc with query handler
Oct 01 16:32:27 ip-172-31-87-75.ec2.internal nagios[66694]: wproc: Registry request: name=Core Worker 66696;pid=66696
Oct 01 16:32:27 ip-172-31-87-75.ec2.internal nagios[66694]: wproc: Registry request: name=Core Worker 66695;pid=66695
Oct 01 16:32:27 ip-172-31-87-75.ec2.internal nagios[66694]: wproc: Registry request: name=Core Worker 66697;pid=66697
Oct 01 16:32:27 ip-172-31-87-75.ec2.internal nagios[66694]: wproc: Registry request: name=Core Worker 66698;pid=66698
Oct 01 16:32:27 ip-172-31-87-75.ec2.internal nagios[66694]: Successfully launched command file worker with pid 66739
[ec2-user@ip-172-31-87-75 nagios-plugins-2.4.11]$ |
```

We can see that Nagios has been initialized correctly and its status is active.

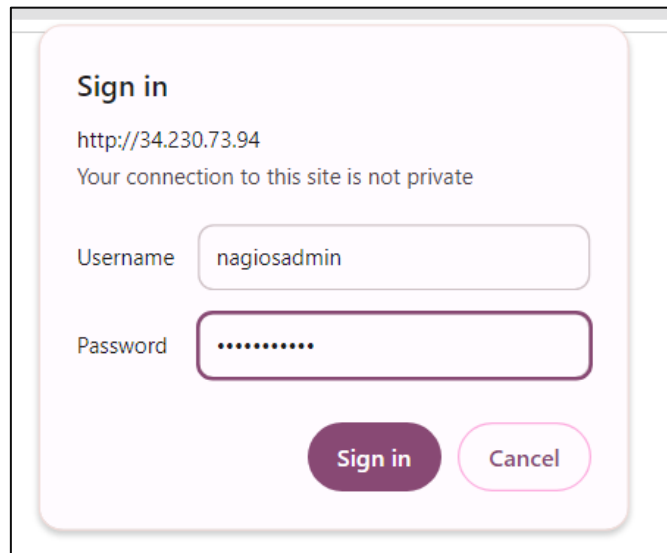
30. Go back to your instances and copy the public IPv4 address

✓	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public IPv4
✓	nagios-host-1	i-0b21c79e1e222bc9d	Running	t2.micro	2/2 checks pa	View alarms +	us-east-1c	ec2-34-230-73-94.com...	34.230.73

i-0b21c79e1e222bc9d (nagios-host-1)		
Details Status and alarms Monitoring Security Networking Storage Tags		
Instance summary Info Instance ID i-0b21c79e1e222bc9d (nagios-host-1)	Public IPv4 address 34.230.73.94 open address	Private IPv4 addresses 172.31.87.75
IPv6 address -	Instance state Running	Public IPv4 DNS ec2-34-230-73-94.compute-1.amazonaws.com open address
Hostname type IP name: ip-172-31-87-75.ec2.internal	Private IP DNS name (IPv4 only) ip-172-31-87-75.ec2.internal	

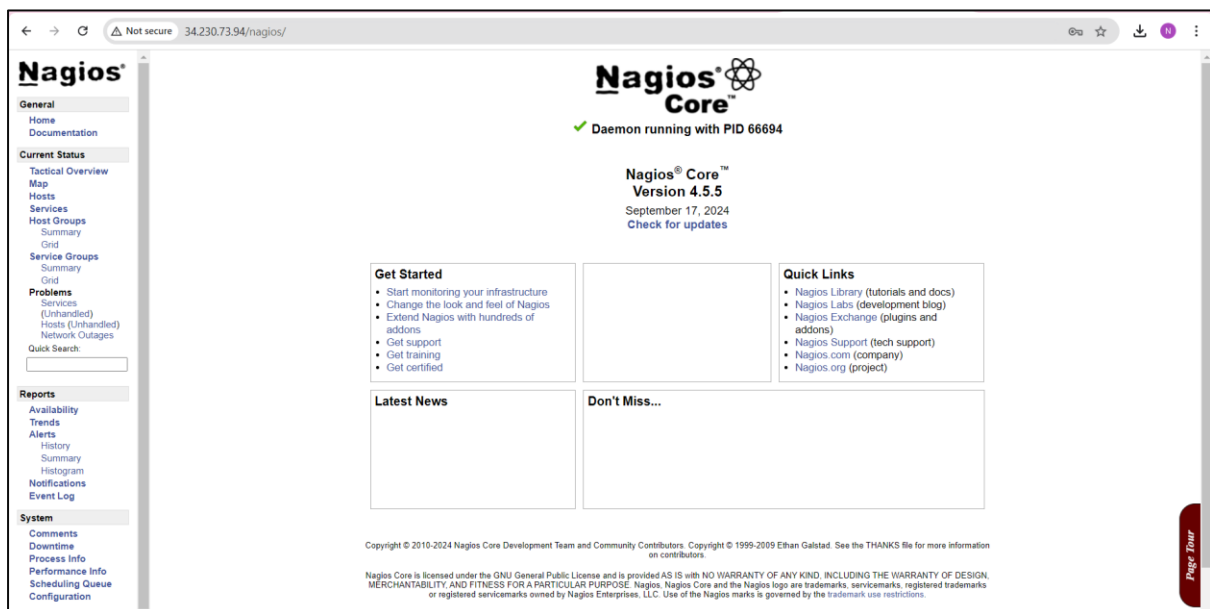
31. Lastly, go to your web browser and type “<http://<public-IPv4-address>/nagios>”
Replace public-IPv4-address with the public ip address of your instance which you copied.

You will get a prompt to enter the username and password that have been set for nagios admin in step 25.



The image shows a 'Sign in' dialog box for Nagios Core. It displays the URL 'http://34.230.73.94' and a warning 'Your connection to this site is not private'. Below this, there are input fields for 'Username' (containing 'nagiosadmin') and 'Password' (masked with dots). At the bottom, there are two buttons: 'Sign in' and 'Cancel'.

You will see the below shown page after entering credentials.



The image shows the Nagios Core 4.5.5 dashboard. The top navigation bar includes 'General', 'Current Status', 'Reports', and 'System'. The main content area displays the Nagios Core logo, version 4.5.5, and the status 'Daemon running with PID 66694'. Below this, there are sections for 'Get Started', 'Quick Links', 'Latest News', and 'Don't Miss...'. The 'Get Started' section lists steps like 'Start monitoring your infrastructure', 'Change the look and feel of Nagios', and 'Extend Nagios with hundreds of addons'. The 'Quick Links' section lists links to 'Nagios Library', 'Nagios Labs', 'Nagios Exchange', 'Nagios Support', 'Nagios.com', and 'Nagios.org'. The 'Latest News' and 'Don't Miss...' sections are currently empty. The footer contains copyright information and a disclaimer.

Conclusion: In this experiment the main issue that I faced was accessing the nagios web interface due to a “Forbidden: You do not have permission to access this resource” error. This issue was resolved by adjusting the inbound security rules and ensuring that all necessary files were installed in the correct directories. It is also important to restart apache after doing any changes for the changes to get reflected. Once Nagios was activated without errors, the output was successfully displayed on the web interface.