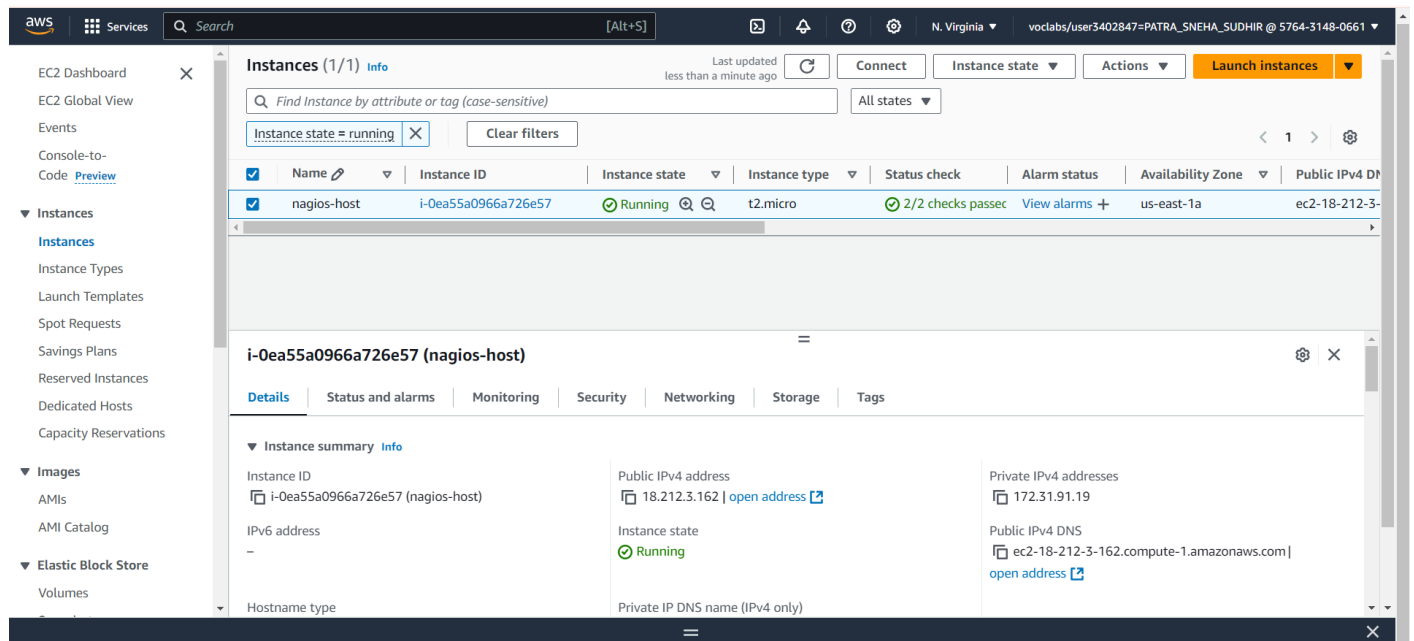


Experiment 9

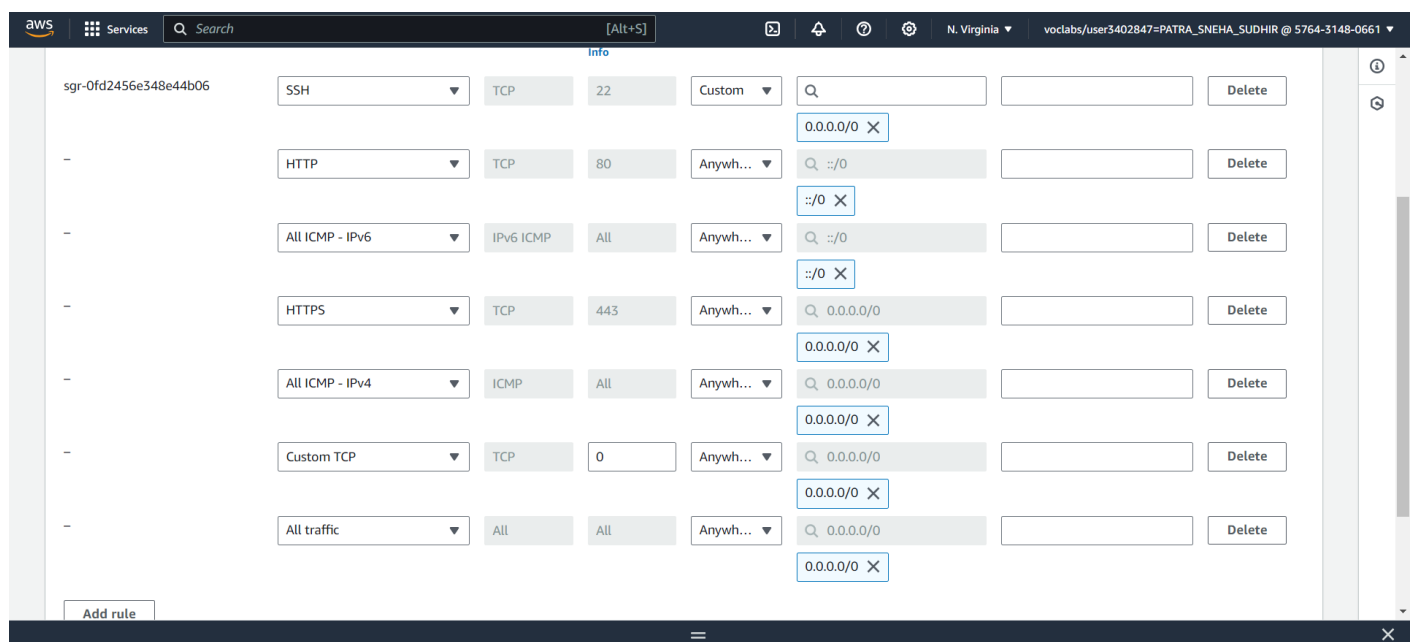
Aim: To Understand Continuous monitoring and Installation and configuration of Nagios Core, Nagios Plugins and NRPE (Nagios Remote Plugin Executor) on Linux Machine.

Step 1: Create an EC2 Instance and name it as nagios-host



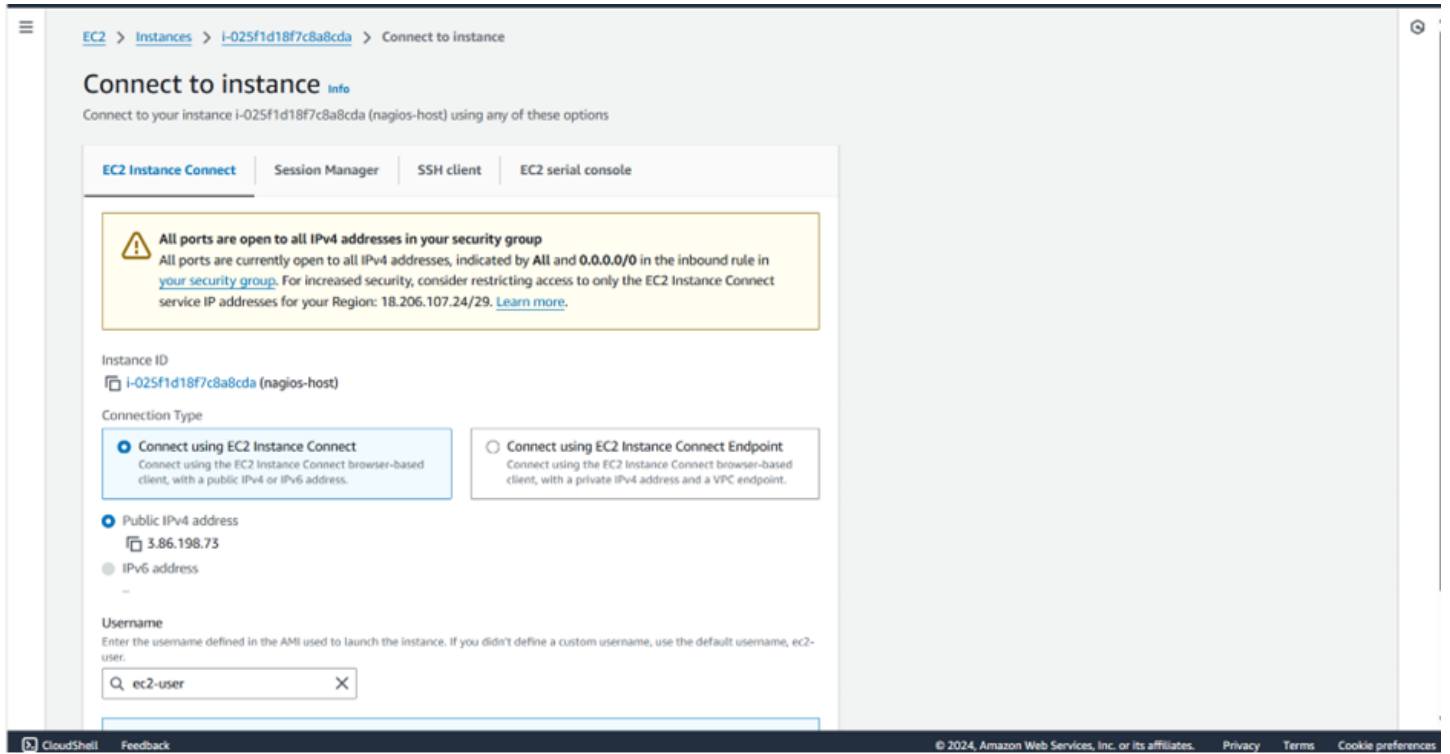
The screenshot displays the AWS Management Console interface. On the left, the navigation menu shows 'Instances' selected. The main panel shows the 'Instances (1/1)' page with a filter for 'Instance state = running'. A table lists the instance 'nagios-host' with ID 'i-0ea55a0966a726e57', state 'Running', type 't2.micro', and public IP 'ec2-18-212-3-162'. Below the table, the 'Details' tab for instance 'i-0ea55a0966a726e57 (nagios-host)' is open, showing fields like Instance ID, Public IPv4 address (18.212.3.162), Instance state (Running), and Public IPv4 DNS (ec2-18-212-3-162.compute-1.amazonaws.com).

Step 2: Under the security groups, click on edit inbound rules and set as shown in the figure below



The screenshot shows the 'Inbound Rules' tab for a security group. It lists several rules with columns for 'Rule ID', 'Protocol', 'Port Range', 'Action', 'Source', and 'Delete'. The rules include SSH (TCP, 22), HTTP (TCP, 80), All ICMP - IPv6 (IPv6 ICMP, All), HTTPS (TCP, 443), All ICMP - IPv4 (ICMP, All), Custom TCP (TCP, 0), and All traffic (All, All). Each rule has a 'Source' field with a search icon and a 'Delete' button.

Step 3: Then select the instance nagios-host and then connect the instance.



Step 3: Now, run the following commands -

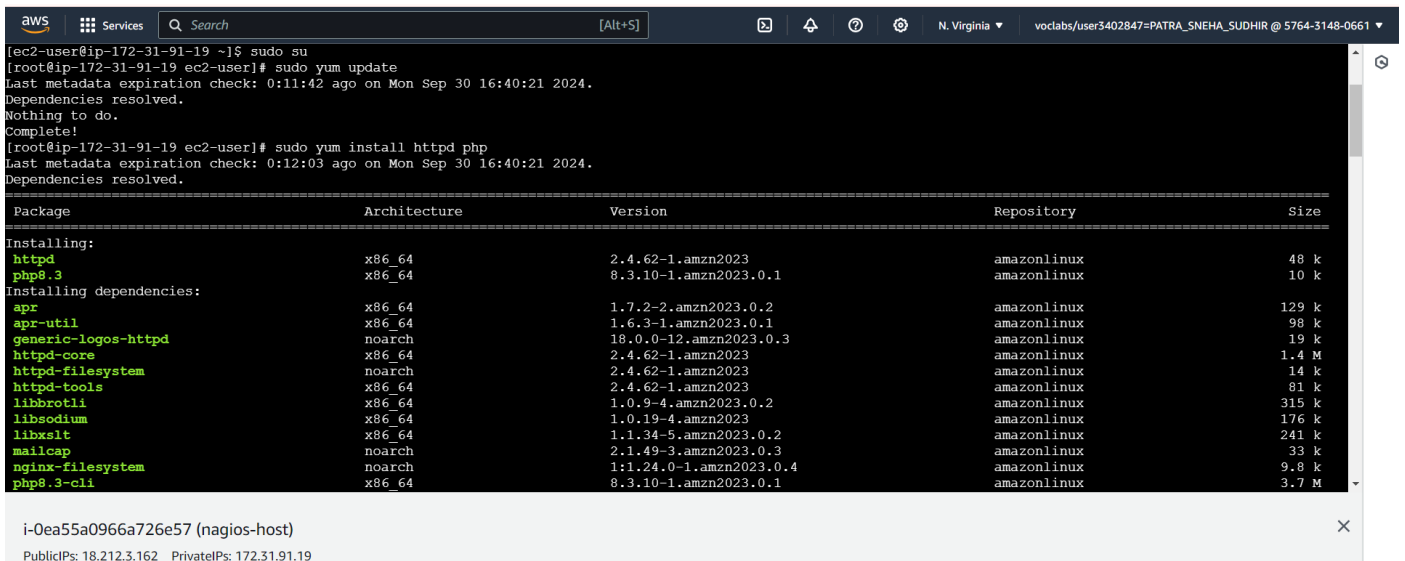
```
sudo su
```

```
sudo yum update
```

```
sudo yum install httpd php
```

```
sudo yum install gcc glibc glibc-common
```

```
sudo yum install gd gd-devel
```



aws Services Search [Alt+S] N. Virginia voclabs/user3402847=PATRA_SNEHA_SUDHIR @ 5764-3148-0661

```
[root@ip-172-31-91-19 ec2-user]# sudo yum install gcc glibc glibc-common
Last metadata expiration check: 0:14:35 ago on Mon Sep 30 16:40:21 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	10 M
gc	x86_64	8.0.4-5.amzn2023.0.2	amazonlinux	105 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

i-0ea55a0966a726e57 (nagios-host)

PublicIPs: 18.212.3.162 PrivateIPs: 172.31.91.19

aws Services Search [Alt+S] N. Virginia voclabs/user3402847=PATRA_SNEHA_SUDHIR @ 5764-3148-0661

```
[root@ip-172-31-91-19 ec2-user]# sudo yum install gd gd-devel
Last metadata expiration check: 0:16:13 ago on Mon Sep 30 16:40:21 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:				
brotili	x86_64	1.0.9-4.amzn2023.0.2	amazonlinux	314 k
brotili-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-filessystem	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
fontsystem	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

i-0ea55a0966a726e57 (nagios-host)

PublicIPs: 18.212.3.162 PrivateIPs: 172.31.91.19

Step 4: Create a new nagios user with its password.

sudo adduser -m nagios

sudo passwd nagios

sudo groupadd nagcmd

sudo usermod -a -G nagcmd nagios

sudo usermod -a -G nagcmd apache

```

[root@ip-172-31-93-157 ec2-user]# sudo adduser -m nagios
[root@ip-172-31-93-157 ec2-user]# sudo passwd nagios
changing password for user nagios.
new password:
retype new password:
passwd: all authentication tokens updated successfully.
[root@ip-172-31-93-157 ec2-user]# sudo groupadd nagcmd
[root@ip-172-31-93-157 ec2-user]# sudo usermod -a -G nagcmd nagios
[root@ip-172-31-93-157 ec2-user]# sudo usermod -a -G nagcmd apache
[root@ip-172-31-93-157 ec2-user]#

```

Step 5: Now, run the following commands -

mkdir ~/downloads

cd ~/downloads

wget <http://prdownloads.sourceforge.net/sourceforge/nagios/nagios-4.0.8.tar.gz>

wget <http://nagios-plugins.org/download/nagios-plugins-2.0.3.tar.gz>

tar xzvf nagios-4.0.8.tar.gz

```

[root@ip-172-31-93-157 ec2-user]# mkdir ~/downloads
[root@ip-172-31-93-157 ec2-user]# cd ~/downloads
[root@ip-172-31-93-157 downloads]# wget
http://prdownloads.sourceforge.net/sourceforge/nagios/nagios-4.0.8.tar.
gz
wget: missing URL.
Usage: wget [OPTION]... [URL]...

Try 'wget --help' for more options.
bash: http://prdownloads.sourceforge.net/sourceforge/nagios/nagios-4.0.8.tar.: No such file or directory
bash: gz: command not found
[root@ip-172-31-93-157 downloads]# wget http://nagios-plugins.org/download/nagios-plugins-2.0.3.tar.gz
--2024-09-30 17:00:06-- http://nagios-plugins.org/download/nagios-plugins-2.0.3.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|:80... connected.
HTTP request sent, awaiting response... 200 OK
Length: 2659772 (2.5M) [application/x-gzip]
Saving to: 'nagios-plugins-2.0.3.tar.gz'

nagios-plugins-2.0.3.tar.gz      100%[=====>]  2.54M  6.16MB/s  in 0.4s

2024-09-30 17:00:07 (6.16 MB/s) - 'nagios-plugins-2.0.3.tar.gz' saved [2659772/2659772]

[root@ip-172-31-93-157 downloads]# tar xzvf nagios-4.0.8.tar.gz
tar (child): nagios-4.0.8.tar.gz: Cannot open: No such file or directory
tar (child): Error is not recoverable: exiting now
tar: Child returned status 2
tar: Error is not recoverable: exiting now
[root@ip-172-31-93-157 downloads]#

```

To resolve the error run the following commands -

wget <http://prdownloads.sourceforge.net/sourceforge/nagios/nagios-4.0.8.tar.gz>

wget <http://nagios-plugins.org/download/nagios-plugins-2.0.3.tar.gz>

tar xzvf nagios-4.0.8.tar.gz

tar xzvf nagios-plugins-2.0.3.tar.gz

cd nagios-4.0.8

```
[root@ip-172-31-93-157 downloads]# wget http://prdownloads.sourceforge.net/sourceforge/nagios/nagios-4.0.8.tar.gz
wget http://nagios-plugins.org/download/nagios-plugins-2.0.3.tar.gz
--2024-09-30 17:03:04-- http://prdownloads.sourceforge.net/sourceforge/nagios/nagios-4.0.8.tar.gz
Resolving prdownloads.sourceforge.net (prdownloads.sourceforge.net)... 204.68.111.105
Connecting to prdownloads.sourceforge.net (prdownloads.sourceforge.net) [204.68.111.105]:80... connected.
HTTP request sent, awaiting response... 301 Moved Permanently
Location: http://downloads.sourceforge.net/project/nagios/nagios-4.x/nagios-4.0.8/nagios-4.0.8.tar.gz [following]
--2024-09-30 17:03:04-- http://downloads.sourceforge.net/project/nagios/nagios-4.x/nagios-4.0.8/nagios-4.0.8.tar.gz
Resolving downloads.sourceforge.net (downloads.sourceforge.net)... 204.68.111.105
Reusing existing connection to prdownloads.sourceforge.net:80.
HTTP request sent, awaiting response... 302 Found
Location: http://versaweb.dl.sourceforge.net/project/nagios/nagios-4.x/nagios-4.0.8/nagios-4.0.8.tar.gz?viasf=1 [following]
--2024-09-30 17:03:04-- http://versaweb.dl.sourceforge.net/project/nagios/nagios-4.x/nagios-4.0.8/nagios-4.0.8.tar.gz?viasf=1
Resolving versaweb.dl.sourceforge.net (versaweb.dl.sourceforge.net)... 162.251.232.173
Connecting to versaweb.dl.sourceforge.net (versaweb.dl.sourceforge.net) [162.251.232.173]:80... connected.
HTTP request sent, awaiting response... 200 OK
Length: 1805059 (1.7M) [application/x-gzip]
Saving to: 'nagios-4.0.8.tar.gz'

nagios-4.0.8.tar.gz          100%[=====>] 1.72M  2.21MB/s  in 0.8s

2024-09-30 17:03:05 (2.21 MB/s) - 'nagios-4.0.8.tar.gz' saved [1805059/1805059]

--2024-09-30 17:03:05-- http://nagios-plugins.org/download/nagios-plugins-2.0.3.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]:80... connected.
HTTP request sent, awaiting response... 200 OK
Length: 2659772 (2.5M) [application/x-gzip]
Saving to: 'nagios-plugins-2.0.3.tar.gz.1'

nagios-plugins-2.0.3.tar.gz.1 100%[=====>] 2.54M  7.26MB/s  in 0.3s

2024-09-30 17:03:05 (7.26 MB/s) - 'nagios-plugins-2.0.3.tar.gz.1' saved [2659772/2659772]
```

```
aws Services Search [Alt+S] N. Virginia voclabs/user3402847=PATRA_SNEHA_SUDHIR @ 5764-3148-0661
nagios-plugins-2.0.3/plugins-scripts/check_rpc.pl
nagios-plugins-2.0.3/plugins-scripts/check_oracle.sh
nagios-plugins-2.0.3/plugins-scripts/utills.pm.in
nagios-plugins-2.0.3/plugins-scripts/check_disk_smb.pl
nagios-plugins-2.0.3/plugins-scripts/t/
nagios-plugins-2.0.3/plugins-scripts/t/check_ifoperstatus.t
nagios-plugins-2.0.3/plugins-scripts/t/check_rpc.t
nagios-plugins-2.0.3/plugins-scripts/t/check_file_age.t
nagios-plugins-2.0.3/plugins-scripts/t/check_disk_smb.t
nagios-plugins-2.0.3/plugins-scripts/t/check_ifstatus.t
nagios-plugins-2.0.3/plugins-scripts/t/utills.t
nagios-plugins-2.0.3/plugins-scripts/check_mailq.pl
nagios-plugins-2.0.3/plugins-scripts/check_wave.pl
nagios-plugins-2.0.3/plugins-scripts/check_ircd.pl
nagios-plugins-2.0.3/plugins-scripts/utills.sh.in
nagios-plugins-2.0.3/plugins-scripts/check_ifstatus.pl
nagios-plugins-2.0.3/plugins-scripts/check_sensors.sh
nagios-plugins-2.0.3/pkg/
nagios-plugins-2.0.3/pkg/fedora/
nagios-plugins-2.0.3/pkg/fedora/requires
nagios-plugins-2.0.3/pkg/solaris/
nagios-plugins-2.0.3/pkg/solaris/preinstall
nagios-plugins-2.0.3/pkg/solaris/solpkg
nagios-plugins-2.0.3/pkg/solaris/pkginfo.in
nagios-plugins-2.0.3/pkg/solaris/pkginfo
nagios-plugins-2.0.3/pkg/redhat/
nagios-plugins-2.0.3/pkg/redhat/requires
[root@ip-172-31-91-19 downloads]#
```

i-Oea55a0966a726e57 (nagios-host)
PublicIPs: 18.212.3.162 PrivateIPs: 172.31.91.19

Step 6: Now to run the configuration script run the following command.
./configure --with-command-group=nagcmd

```
aws Services Search [Alt+S] N. Virginia voclabs/user3402847=PATRA_SNEHA_SUDHIR @ 5764-3148-0661
[root@ip-172-31-91-19 downloads]# cd nagios-4.0.8
[root@ip-172-31-91-19 nagios-4.0.8]# ./configure --with-command-group=nagcmd
checking for a BSD-compatible install... /usr/bin/install -c
checking build system type... x86_64-unknown-linux-gnu
checking host system type... x86_64-unknown-linux-gnu
checking for gcc... gcc
checking for gcc default output file name... a.out
checking whether the C compiler works... yes
checking whether we are cross compiling... no
checking for suffix of executables...
checking for suffix of object files... o
checking whether we are using the GNU C compiler... yes
checking whether gcc accepts -g... yes
checking for gcc option to accept ISO C89... none needed
checking whether make sets $(MAKE)... yes
checking for strip... /usr/bin/strip
checking how to run the C preprocessor... gcc -E
checking for grep that handles long lines and -e... /usr/bin/grep
checking for egrep... /usr/bin/grep -E
checking for ANSI C header files... yes
checking whether time.h and sys/time.h may both be included... yes
checking for sys/wait.h that is POSIX.1 compatible... yes
checking for sys/types.h... yes
checking for sys/stat.h... yes
checking for stdlib.h... yes
checking for string.h... yes
checking for memory.h... yes
checking for strings.h... yes
```

i-Oea55a0966a726e57 (nagios-host)
PublicIPs: 18.212.3.162 PrivateIPs: 172.31.91.19

Step 7: Now, to compile the source code run the following command -
make all

```
aws Services Search [Alt+S] N. Virginia voclabs/user3402847=PATRA_SNEHA_SUDHIR @ 5764-3148-0661

[root@ip-172-31-91-19 nagios-4.0.8]# make all
cd ./base && make
make[1]: Entering directory '/root/downloads/nagios-4.0.8/base'
gcc -Wall -I.. -g -O2 -DHAVE_CONFIG_H -DNSCORE -c -o nagios.o nagios.c
gcc -Wall -I.. -g -O2 -DHAVE_CONFIG_H -DNSCORE -c -o broker.o broker.c
gcc -Wall -I.. -g -O2 -DHAVE_CONFIG_H -DNSCORE -c -o nebmmods.o nebmmods.c
gcc -Wall -I.. -g -O2 -DHAVE_CONFIG_H -DNSCORE -c -o ../common/shared.o ../common/shared.c
gcc -Wall -I.. -g -O2 -DHAVE_CONFIG_H -DNSCORE -c -o nerd.o nerd.c
gcc -Wall -I.. -g -O2 -DHAVE_CONFIG_H -DNSCORE -c -o query-handler.o query-handler.c
gcc -Wall -I.. -g -O2 -DHAVE_CONFIG_H -DNSCORE -c -o workers.o workers.c
In function 'get_wproc_list',
    inlined from 'get_worker' at workers.c:224:12:
workers.c:209:17: warning: '%s' directive argument is null [-Wformat-overflow=]
  209 |         log_debug_info(DEEUGL_CHECKS, 1, "Found specialized worker(s) for '%s'", (slash && *slash != '/') ? slash : cmd_name);
      |         ^~~~~~
gcc -Wall -I.. -g -O2 -DHAVE_CONFIG_H -DNSCORE -c -o checks.o checks.c
gcc -Wall -I.. -g -O2 -DHAVE_CONFIG_H -DNSCORE -c -o config.o config.c
gcc -Wall -I.. -g -O2 -DHAVE_CONFIG_H -DNSCORE -c -o commands.o commands.c
commands.c: In function 'process_passive_service_check':
commands.c:2247:19: warning: assignment discards 'const' qualifier from pointer target type [-Wdiscarded-qualifiers]
 2247 |         cr.source = command_worker.source_name;
      |         ^
commands.c: In function 'process_passive_host_check':
commands.c:2339:19: warning: assignment discards 'const' qualifier from pointer target type [-Wdiscarded-qualifiers]
 2339 |         cr.source = command_worker.source_name;
      |         ^
gcc -Wall -I.. -g -O2 -DHAVE_CONFIG_H -DNSCORE -c -o events.o events.c
gcc -Wall -I.. -g -O2 -DHAVE_CONFIG_H -DNSCORE -c -o flapping.o flapping.c

i-0ea55a0966a726e57 (nagios-host)
PublicIPs: 18.212.3.162 PrivateIPs: 172.31.91.19
```

```
aws Services Search [Alt+S] N. Virginia voclabs/user3402847=PATRA_SNEHA_SUDHIR @ 5764-3148-0661

[root@ip-172-31-91-19 nagios-4.0.8]# sudo make install
cd ./base && make install
make[1]: Entering directory '/root/downloads/nagios-4.0.8/base'
make install-basic
make[2]: Entering directory '/root/downloads/nagios-4.0.8/base'
/usr/bin/install -c -m 775 -o nagios -g nagios -d /usr/local/nagios/bin
/usr/bin/install -c -m 774 -o nagios -g nagios /usr/local/nagios/bin
/usr/bin/install -c -m 774 -o nagios -g nagios /usr/local/nagios/bin
make[2]: Leaving directory '/root/downloads/nagios-4.0.8/base'
make strip-post-install
make[2]: Entering directory '/root/downloads/nagios-4.0.8/base'
/usr/bin/strip /usr/local/nagios/bin/nagios
/usr/bin/strip /usr/local/nagios/bin/nagiostats
make[2]: Leaving directory '/root/downloads/nagios-4.0.8/base'
make[1]: Leaving directory '/root/downloads/nagios-4.0.8/base'
cd ./cgi && make install
make[1]: Entering directory '/root/downloads/nagios-4.0.8/cgi'
make install-basic
make[2]: Entering directory '/root/downloads/nagios-4.0.8/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 -m 775 -o nagios -g nagios $file /usr/local/nagios/sbin; \
done
/usr/bin/install: cannot stat '*.cgi': No such file or directory
make[2]: *** [Makefile:205: install-basic] Error 1
make[2]: Leaving directory '/root/downloads/nagios-4.0.8/cgi'
make[1]: *** [Makefile:197: install] Error 2
make[1]: Leaving directory '/root/downloads/nagios-4.0.8/cgi'

i-0ea55a0966a726e57 (nagios-host)
PublicIPs: 18.212.3.162 PrivateIPs: 172.31.91.19
```

```
[root@ip-172-31-93-157 nagios-4.0.8]# sudo make install-init
/usr/bin/install -c -m 755 -d -o root -g root /etc/rc.d/init.d
/usr/bin/install -c -m 755 -o root -g root /etc/rc.d/init.d/nagios

*** Init script installed ***

[root@ip-172-31-93-157 nagios-4.0.8]# sudo make install-config
/usr/bin/install -c -m 775 -o nagios -g nagios -d /usr/local/nagios/etc
/usr/bin/install -c -m 775 -o nagios -g nagios -d /usr/local/nagios/etc/objects
/usr/bin/install -c -b -m 664 -o nagios -g nagios sample-config/nagios.cfg /usr/local/nagios/etc/nagios.cfg
/usr/bin/install -c -b -m 664 -o nagios -g nagios sample-config/cgi.cfg /usr/local/nagios/etc/cgi.cfg
/usr/bin/install -c -b -m 660 -o nagios -g nagios sample-config/resource.cfg /usr/local/nagios/etc/resource.cfg
/usr/bin/install -c -b -m 664 -o nagios -g nagios sample-config/template-object/templates.cfg /usr/local/nagios/etc/objects/templates.cfg
/usr/bin/install -c -b -m 664 -o nagios -g nagios sample-config/template-object/commands.cfg /usr/local/nagios/etc/objects/commands.cfg
/usr/bin/install -c -b -m 664 -o nagios -g nagios sample-config/template-object/contacts.cfg /usr/local/nagios/etc/objects/contacts.cfg
/usr/bin/install -c -b -m 664 -o nagios -g nagios sample-config/template-object/timeperiods.cfg /usr/local/nagios/etc/objects/timeperiods.cfg
/usr/bin/install -c -b -m 664 -o nagios -g nagios sample-config/template-object/localhost.cfg /usr/local/nagios/etc/objects/localhost.cfg
/usr/bin/install -c -b -m 664 -o nagios -g nagios sample-config/template-object/windows.cfg /usr/local/nagios/etc/objects/windows.cfg
/usr/bin/install -c -b -m 664 -o nagios -g nagios sample-config/template-object/printer.cfg /usr/local/nagios/etc/objects/printer.cfg
/usr/bin/install -c -b -m 664 -o nagios -g nagios sample-config/template-object/switch.cfg /usr/local/nagios/etc/objects/switch.cfg

*** Config files installed ***

Remember, these are 'SAMPLE' config files. You'll need to read
the documentation for more information on how to actually define
services, hosts, etc. to fit your particular needs.

[root@ip-172-31-93-157 nagios-4.0.8]# sudo make install-commandmode
/usr/bin/install -c -m 775 -o nagios -g nagcmd -d /usr/local/nagios/var/rw
chmod g+s /usr/local/nagios/var/rw

*** External command directory configured ***

[root@ip-172-31-93-157 nagios-4.0.8]#
```

To resolve the errors run the following commands -

```
sudo yum install -y gcc glibc glibc-common gd gd-devel make net-snmp openssl-devel
rm -rf nagios-4.0.8
cd ~/downloads/nagios-4.4.6
./configure --with-command-group=nagcmd
make all
sudo make install
```



```
web interface

make install-classicui
- This installs the classic theme for the Nagios
web interface

*** Support Notes ***
If you have questions about configuring or running Nagios,
please make sure that you:

- Look at the sample config files
- Read the documentation on the Nagios Library at:
  https://library.nagios.com

before you post a question to one of the mailing lists.
Also make sure to include pertinent information that could
help others help you. This might include:

- What version of Nagios you are using
- What version of the plugins you are using
- Relevant snippets from your config files
- Relevant error messages from the Nagios log file

For more information on obtaining support for Nagios, visit:

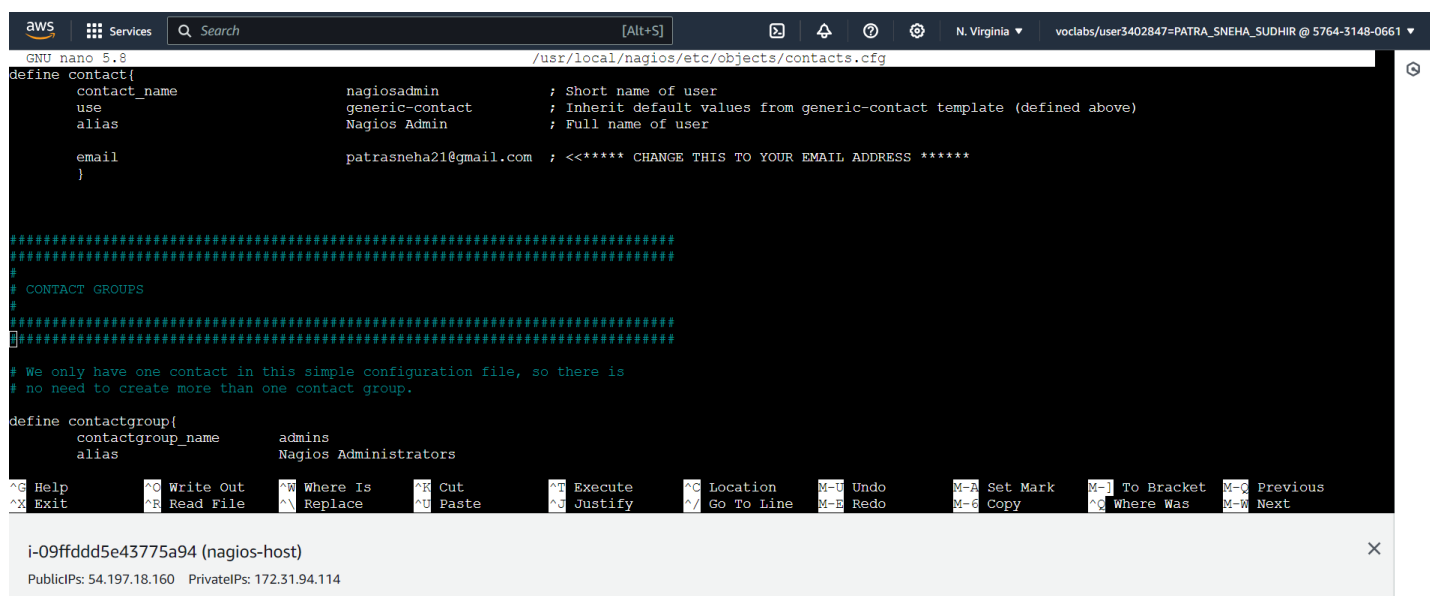
  https://support.nagios.com

*****
Enjoy.

root@ip-172-31-02-163:~# cat /etc/nagios/objects/contacts.cfg
```

Step 8: Edit the config file and change the email address.

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



```
GNU nano 5.8 /usr/local/nagios/etc/objects/contacts.cfg
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              patrasneha21@gmail.com ; <***** CHANGE THIS TO YOUR EMAIL ADDRESS *****
}

#####
#
# CONTACT GROUPS
#
#####

# We only have one contact in this simple configuration file, so there is
# no need to create more than one contact group.

define contactgroup{
    contactgroup_name admins
    alias              Nagios Administrators
}

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

i-09ffddd5e43775a94 (nagios-host)
PublicIPs: 54.197.18.160 PrivateIPs: 172.31.94.114
```

Step 9: Now run the following commands –

`sudo make install-webconf`

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

`sudo service httpd restart`

`cd ~/downloads`

`tar zxvf nagios-plugins-2.0.3.tar.gz`

```

- Read the documentation on the Nagios Library at:
  https://library.nagios.com

before you post a question to one of the mailing lists.
Also make sure to include pertinent information that could
help others help you. This might include:

- What version of Nagios you are using
- What version of the plugins you are using
- Relevant snippets from your config files
- Relevant error messages from the Nagios log file

For more information on obtaining support for Nagios, visit:

  https://support.nagios.com

*****

Enjoy.

[root@ip-172-31-93-157 nagios-4.4.6]# sudo nano /usr/local/nagios/etc/objects/contacts.cfg
[root@ip-172-31-93-157 nagios-4.4.6]# 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 ***

[root@ip-172-31-93-157 nagios-4.4.6]# sudo htpasswd -c /usr/local/nagios/etc/htpasswd.users nagiosadmin
New password:
Re-type new password:
Adding password for user nagiosadmin

```

```

[root@ip-172-31-93-157 nagios-4.4.6]# sudo service httpd restart
Redirecting to /bin/systemctl restart httpd.service
[root@ip-172-31-93-157 nagios-4.4.6]# cd ~/downloads
tar xzvf nagios-plugins-2.0.3.tar.gz
nagios-plugins-2.0.3/
nagios-plugins-2.0.3/perlmods/
nagios-plugins-2.0.3/perlmods/Config-Tiny-2.14.tar.gz
nagios-plugins-2.0.3/perlmods/parent-0.226.tar.gz
nagios-plugins-2.0.3/perlmods/Test-Simple-0.98.tar.gz
nagios-plugins-2.0.3/perlmods/Makefile.in
nagios-plugins-2.0.3/perlmods/version-0.9903.tar.gz
nagios-plugins-2.0.3/perlmods/Makefile.am
nagios-plugins-2.0.3/perlmods/Module-Runtime-0.013.tar.gz
nagios-plugins-2.0.3/perlmods/Module-Metadata-1.000014.tar.gz
nagios-plugins-2.0.3/perlmods/Params-Validate-1.08.tar.gz
nagios-plugins-2.0.3/perlmods/Class-Accessor-0.34.tar.gz
nagios-plugins-2.0.3/perlmods/Try-Tiny-0.18.tar.gz
nagios-plugins-2.0.3/perlmods/Module-Implementation-0.07.tar.gz
nagios-plugins-2.0.3/perlmods/Makefile
nagios-plugins-2.0.3/perlmods/Perl-OSType-1.003.tar.gz
nagios-plugins-2.0.3/perlmods/install_order
nagios-plugins-2.0.3/perlmods/Nagios-Plugin-0.36.tar.gz
nagios-plugins-2.0.3/perlmods/Math-Calc-Units-1.07.tar.gz
nagios-plugins-2.0.3/perlmods/Module-Build-0.4007.tar.gz
nagios-plugins-2.0.3/ABOUT-NLS
nagios-plugins-2.0.3/configure.ac
nagios-plugins-2.0.3/Makefile.in
nagios-plugins-2.0.3/config.h.in
nagios-plugins-2.0.3/ChangeLog
nagios-plugins-2.0.3/AUTHORS
nagios-plugins-2.0.3/lib/
nagios-plugins-2.0.3/lib/parse_ini.h
nagios-plugins-2.0.3/lib/extra_opts.c
nagios-plugins-2.0.3/lib/Makefile.in

```

Step 10: Compile and install plugins

cd nagios-plugins-2.0.3

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

make

sudo make install

```

/usr/bin/install -c -o nagios -g nagios check_dhcp /usr/local/nagios/libexec/check_dhcp
chown root /usr/local/nagios/libexec/check_dhcp
chmod ug-rx,usa /usr/local/nagios/libexec/check_dhcp
/usr/bin/install -c -o nagios -g nagios check_icmp /usr/local/nagios/libexec/check_icmp
chown root /usr/local/nagios/libexec/check_icmp
chmod ug-rx,usa /usr/local/nagios/libexec/check_icmp
make[2]: Nothing to be done for 'install-data-am'.
make[2]: Leaving directory '/root/downloads/nagios-plugins-2.0.3/plugins-root'
make[1]: Leaving directory '/root/downloads/nagios-plugins-2.0.3/plugins-root'
making install in po
make[1]: Entering directory '/root/downloads/nagios-plugins-2.0.3/po'
/usr/bin/mkdir -p /usr/local/nagios/share
installing fr.gmo as /usr/local/nagios/share/locale/fr/LC_MESSAGES/nagios-plugins.mo
installing de.gmo as /usr/local/nagios/share/locale/de/LC_MESSAGES/nagios-plugins.mo
if test "nagios-plugins" = "gettext-tools"; then \
  /usr/bin/mkdir -p /usr/local/nagios/share/gettext/po; \
  for file in Makefile.in.in remove-potdate.s.in Makevars.template; do \
    /usr/bin/install -c -o nagios -g nagios -m 644 ./${file} \
      /usr/local/nagios/share/gettext/po/${file}; \
  done; \
  for file in Makevars; do \
    rm -f /usr/local/nagios/share/gettext/po/${file}; \
  done; \
else \
  : ? \
fi
make[1]: Leaving directory '/root/downloads/nagios-plugins-2.0.3/po'
make[1]: Entering directory '/root/downloads/nagios-plugins-2.0.3'
make[2]: Entering directory '/root/downloads/nagios-plugins-2.0.3'
make[2]: Nothing to be done for 'install-exec-am'.
make[2]: Nothing to be done for 'install-data-am'.
make[2]: Leaving directory '/root/downloads/nagios-plugins-2.0.3'
make[1]: Leaving directory '/root/downloads/nagios-plugins-2.0.3'
[root@ip-172-31-93-157 nagios-plugins-2.0.3]#

```


Step 11: To start nagios run the following commands –

`sudo chkconfig --add nagios`

`sudo chkconfig nagios on`

Verify using the following command -

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

```
[root@ip-172-31-93-157 nagios-plugins-2.0.3]# sudo chkconfig --add nagios
sudo chkconfig nagios on
[root@ip-172-31-93-157 nagios-plugins-2.0.3]# sudo /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.
  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
```

If there are no errors run the following command –

`sudo service nagios start`

```
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.
  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
[root@ip-172-31-93-157 nagios-plugins-2.0.3]# sudo service nagios start
Starting nagios (via systemctl): [ OK ]
[root@ip-172-31-93-157 nagios-plugins-2.0.3]#
```

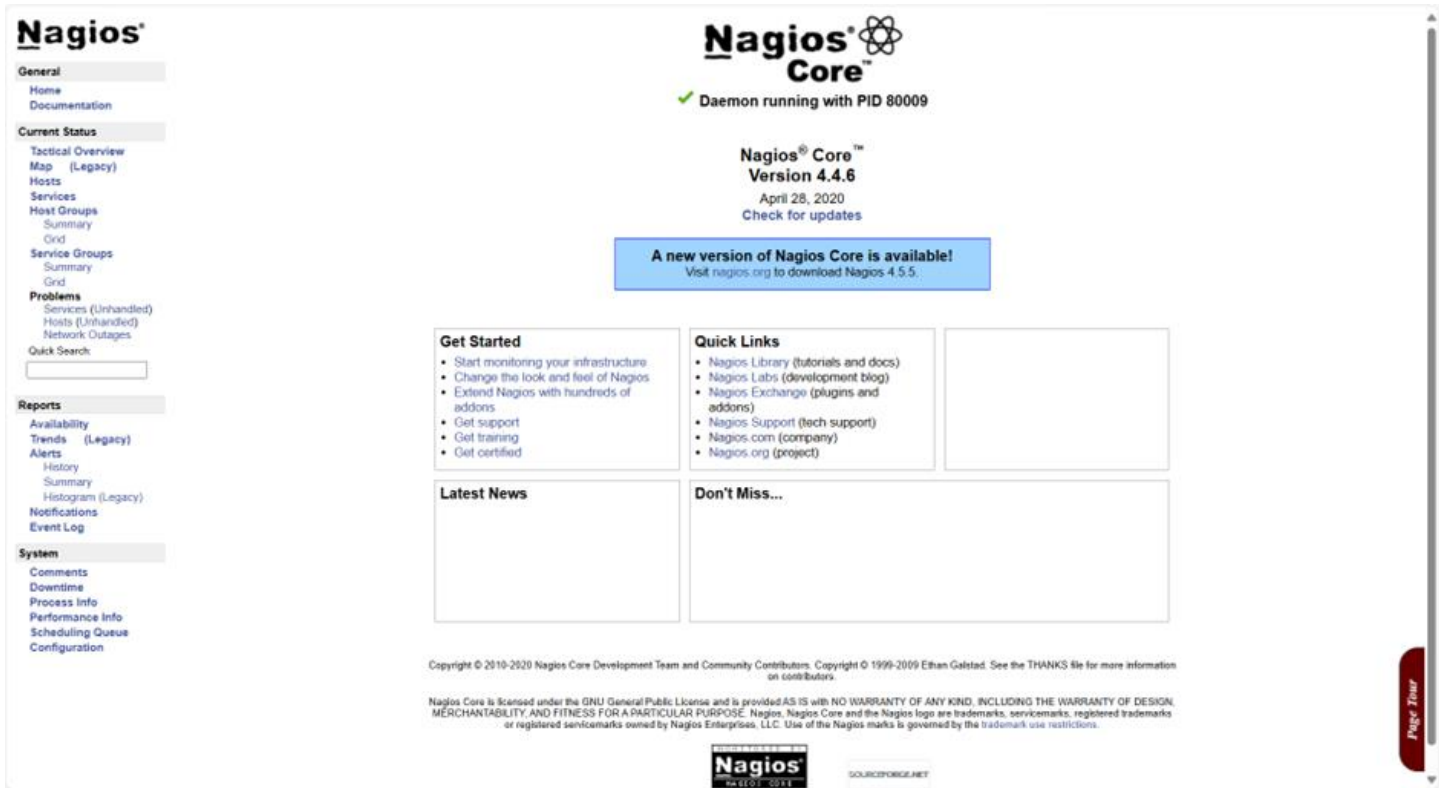
Check status using the following command -

`sudo systemctl status nagios`

```
[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:sysinit-system-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
            └─@0009 /usr/local/nagios/bin/nagios -d /usr/local/nagios/etc/nagios.cfg
            └─@0011 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
            └─@0012 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
            └─@0013 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
            └─@0014 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
            └─@0037 /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 12: Go to EC2 instance and copy the public IP address of the instance. Now visit http://<your_public_ip_address>/nagios Enter correct credentials and then you will see this page.



Conclusion: Nagios Core, Nagios Plugins and NRPE (Nagios Remote Plugin Executor) was installed and configured.