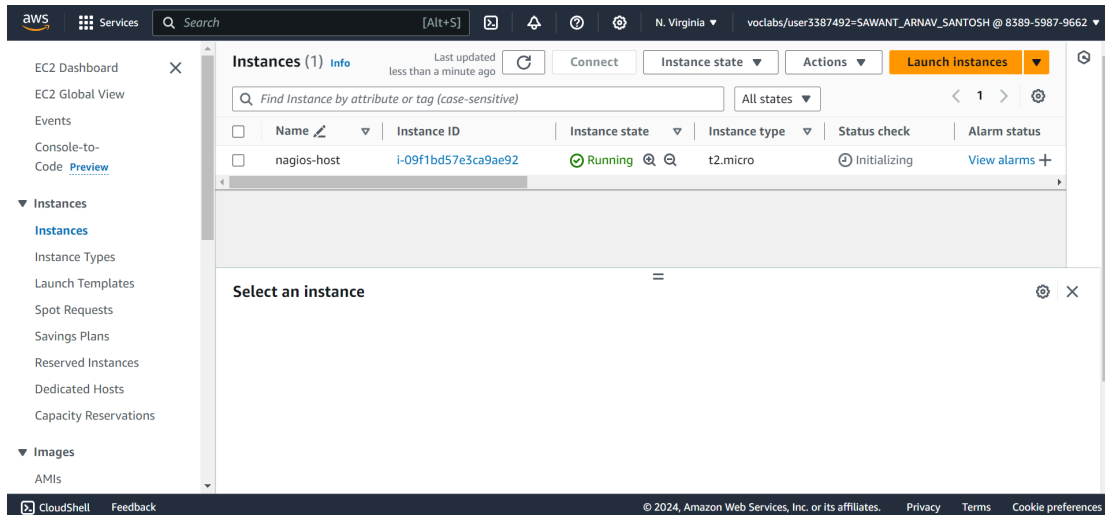
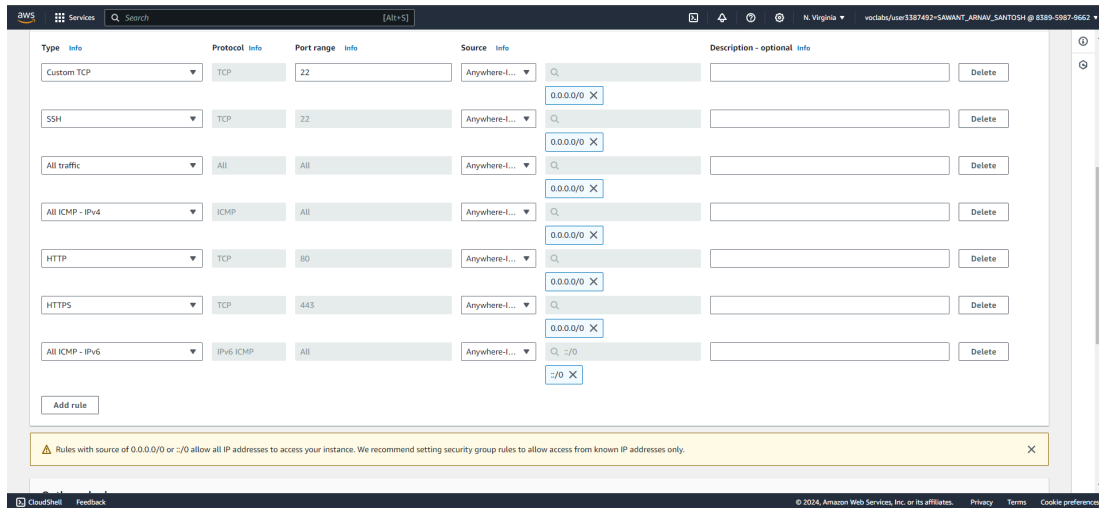


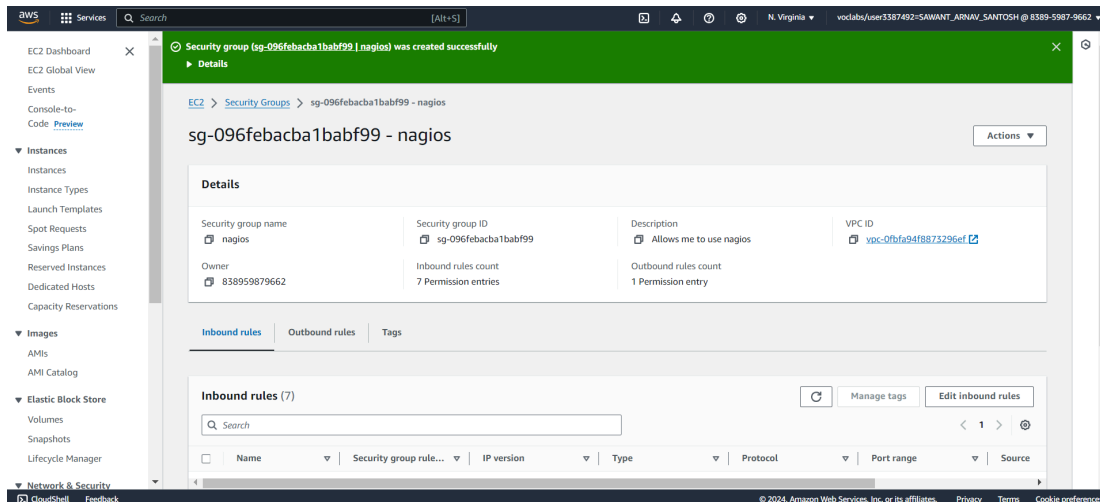
Create an Amazon-Linux EC2 instance , name it **nagios-host**



1. Configure security group (ensure HTTP, HTTPS, SSH, ICMP are open from everywhere) you can navigate to **security groups** for it which is present on the left side or you can search from the search bar



2. Then it should appear something like this



- Look once you created the security group what you need to do is “add your existing security group like this”

▼ Network settings

Info

Edit

Network

Info

vpc-0fbfa94f8873296ef

Subnet

Info

No preference (Default subnet in any availability zone)

Auto-assign public IP

Info

Enable

Additional charges apply when outside of free tier allowance

Firewall (security groups)

Info

A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your instance.

Create security group

Select existing security group

Common security groups

Info

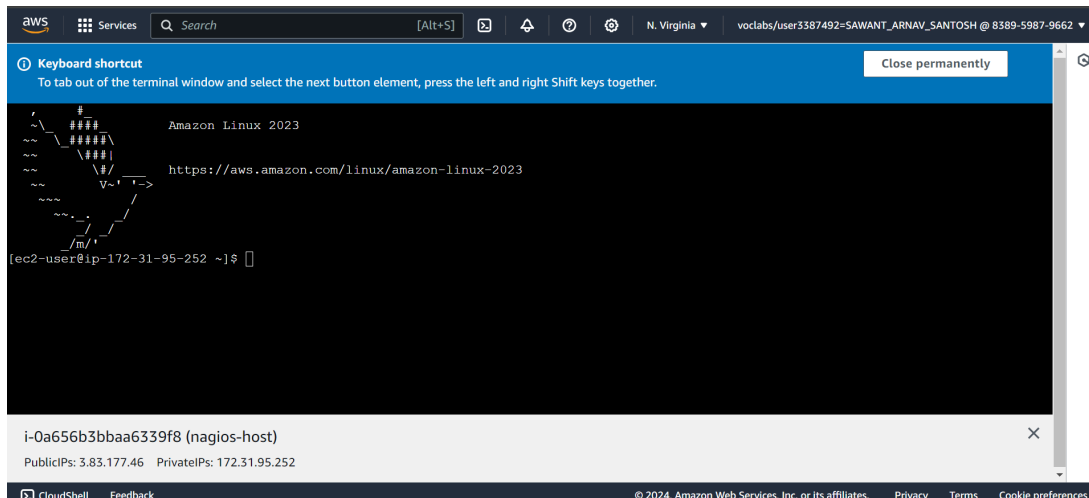
Select security groups

nagios sg-096febcb1b1bf99

VPC: vpc-0fbfa94f8873296ef

Compare security group rules

- Your dashboard then should look like this



5. Run these following commands


```
sudo yum update
sudo yum install httpd php
sudo yum install gcc glibc glibc-common
sudo yum install gd gd-devel
```

```
Complete!
[ec2-user@ip-172-31-95-252 ~]$ sudo yum install gd gd-devel
Last metadata expiration check: 0:04:02 ago on Tue Oct 1 09:23:43 2024.
Dependencies resolved.
```

| Package | Architecture | Version | Repository | Size |
|---------------------------------|--------------|-------------------------|-------------|------|
| Installing: | | | | |
| gd | x86_64 | 2.3.3-5.amzn2023.0.3 | amazonlinux | 139 |
| gd-devel | x86_64 | 2.3.3-5.amzn2023.0.3 | amazonlinux | 38 |
| Installing dependencies: | | | | |
| broccoli | x86_64 | 1.0.9-4.amzn2023.0.2 | amazonlinux | 314 |
| broccoli-devel | x86_64 | 1.0.9-4.amzn2023.0.2 | amazonlinux | 31 |
| bzip2-devel | x86_64 | 1.0.8-6.amzn2023.0.2 | amazonlinux | 214 |
| cairo | x86_64 | 1.17.6-2.amzn2023.0.1 | amazonlinux | 684 |
| cmake-filesystem | x86_64 | 3.22.2-1.amzn2023.0.4 | amazonlinux | 16 |
| fontconfig | x86_64 | 2.13.94-2.amzn2023.0.2 | amazonlinux | 273 |
| fontconfig-devel | x86_64 | 2.13.94-2.amzn2023.0.2 | amazonlinux | 128 |
| fontconfig-devel | noarch | 1:2.0.5-12.amzn2023.0.2 | amazonlinux | 9.5 |
| fontconfig | x86_64 | 2.13.2-5.amzn2023.0.1 | amazonlinux | 423 |

6. Create a new nagios user


```
sudo adduser -m nagios
sudo passwd nagios
```

```
libjpeg-turbo-devel-2.1.4-2.amzn2023.0.5.x86_64
libpng-2:1.6.37-10.amzn2023.0.6.x86_64
libselinux-devel-3.4-5.amzn2023.0.2.x86_64
libtiff-4.4.0-4.amzn2023.0.18.x86_64
libwebp-1.2.4-1.amzn2023.0.6.x86_64
libxcb-1.13.1-7.amzn2023.0.2.x86_64
libxml2-devel-2.10.4-1.amzn2023.0.6.x86_64
pcr2-utf16-10.40-1.amzn2023.0.3.x86_64
pixman-0.40.0-3.amzn2023.0.3.x86_64
xml-common-0.6.3-56.amzn2023.0.2.noarch
xz-devel-5.2.5-9.amzn2023.0.2.x86_64

libmount-devel-2.37.4-1.amzn2023.0.4.x86_64
libpng-devel-2:1.6.37-10.amzn2023.0.6.x86_64
libsepol-devel-3.4-3.amzn2023.0.3.x86_64
libtiff-devel-4.4.0-4.amzn2023.0.18.x86_64
libwebp-devel-1.2.4-1.amzn2023.0.6.x86_64
libxcb-devel-1.13.1-7.amzn2023.0.2.x86_64
pcr2-devel-10.40-1.amzn2023.0.3.x86_64
pcr2-utf32-10.40-1.amzn2023.0.3.x86_64
sysprof-capture-devel-3.40.1-2.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

Complete!
[ec2-user@ip-172-31-95-252 ~]$ sudo adduser -m nagios
[ec2-user@ip-172-31-95-252 ~]$ sudo passwd nagios
Changing password for user nagios.
New password:
BAD PASSWORD: The password contains the user name in some form
Retype new password:
passwd: all authentication tokens updated successfully.
[ec2-user@ip-172-31-95-252 ~]$

i-Oa656b3bbaa6339f8 (nagios-host)
PublicIPs: 3.83.177.46 PrivateIPs: 172.31.95.252

CloudShell Feedback
© 2024, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences
```

7. Create a new user group

`sudo groupadd nagcmd`

```
[ec2-user@ip-172-31-95-252 ~]$ sudo groupadd nagcmd
[ec2-user@ip-172-31-95-252 ~]$
```

8. Add users to the group

`sudo usermod -a -G nagcmd nagios`

`sudo usermod -a -G nagcmd apache`

```
[ec2-user@ip-172-31-95-252 ~]$ sudo usermod -a -G nagcmd nagios
[ec2-user@ip-172-31-95-252 ~]$ sudo usermod -a -G nagcmd apache
[ec2-user@ip-172-31-95-252 ~]$
```

9. Create a directory for Nagios downloads

`mkdir ~/downloads`

`cd ~/downloads`

```
[ec2-user@ip-172-31-95-252 ~]$ mkdir ~/downloads
[ec2-user@ip-172-31-95-252 ~]$ cd ~/downloads
[ec2-user@ip-172-31-95-252 downloads]$
```

10. Download nagios and plugin source files

`wget https://assets.nagios.com/downloads/nagioscore/releases/nagios-4.4.6.tar.gz`

`wget https://nagios-plugins.org/download/nagios-plugins-2.3.3.tar.gz`

The above is the command - these are the 2 separate commands

```
[ec2-user@ip-172-31-95-252 downloads]$ wget https://assets.nagios.com/downloads/nagioscore/releases/nagios-4.4.6.tar.gz
--2024-10-01 09:40:23-- https://assets.nagios.com/downloads/nagioscore/releases/nagios-4.4.6.tar.gz
Resolving assets.nagios.com (assets.nagios.com)... 45.79.49.120, 2600:3c00::f03c:92ff:fe7f:45ce
Connecting to assets.nagios.com (assets.nagios.com)|45.79.49.120|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 11333414 (11M) [application/x-gzip]
Saving to: 'nagios-4.4.6.tar.gz'

nagios-4.4.6.tar.gz      100%[=====>] 10.81M  13.4MB/s  in 0.8s

2024-10-01 09:40:24 (13.4 MB/s) - 'nagios-4.4.6.tar.gz' saved [11333414/11333414]

[ec2-user@ip-172-31-95-252 downloads]$

[ec2-user@ip-172-31-95-252 downloads]$ wget https://nagios-plugins.org/download/nagios-plugins-2.3.3.tar.gz
--2024-10-01 09:41:23-- https://nagios-plugins.org/download/nagios-plugins-2.3.3.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|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 2782610 (2.7M) [application/x-gzip]
Saving to: 'nagios-plugins-2.3.3.tar.gz.1'

nagios-plugins-2.3.3.tar.gz.1  100%[=====>] 2.65M  7.57MB/s  in 0.4s

2024-10-01 09:41:23 (7.57 MB/s) - 'nagios-plugins-2.3.3.tar.gz.1' saved [2782610/2782610]

[ec2-user@ip-172-31-95-252 downloads]$
```

11. Extract the source nagios file


```
tar zxvf nagios-4.4.6.tar.gz
cd nagios-4.4.6
```

```
[ec2-user@ip-172-31-95-252 downloads]$ tar zxvf nagios-4.4.6.tar.gz
cd nagios-4.4.6
nagios-4.4.6/
nagios-4.4.6/.gitignore
nagios-4.4.6/.travis.yml
nagios-4.4.6/CONTRIBUTING.md
nagios-4.4.6/Changelog
nagios-4.4.6/INSTALLING
nagios-4.4.6/LLEGAL
nagios-4.4.6/LICENSE
nagios-4.4.6/Makefile.in
nagios-4.4.6/README.md
nagios-4.4.6/THANKS
nagios-4.4.6/UPGRADING
nagios-4.4.6/aclocal.m4
nagios-4.4.6/autoconf-macros/
nagios-4.4.6/autoconf-macros/.gitignore
nagios-4.4.6/autoconf-macros/CHANGELOG.md
```

12. Run the configuration script


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

```
[ec2-user@ip-172-31-95-252 nagios-4.4.6]$ ./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 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 whether ln -s works... yes
checking for strip... /usr/bin/strip
```

13. Compile the source code

make all

```
[ec2-user@ip-172-31-95-252 nagios-4.4.6]$ make all
cd ./base && make
make[1]: Entering directory '/home/ec2-user/downloads/nagios-4.4.6/base'
make -C ../lib
make[2]: Entering directory '/home/ec2-user/downloads/nagios-4.4.6/lib'
gcc -Wall -g -O2 -DHAVE_CONFIG_H -c queue.c -o queue.o
gcc -Wall -g -O2 -DHAVE_CONFIG_H -c kvvec.c -o kvvec.o
gcc -Wall -g -O2 -DHAVE_CONFIG_H -c iocache.c -o iocache.o
gcc -Wall -g -O2 -DHAVE_CONFIG_H -c iobroker.c -o iobroker.o
gcc -Wall -g -O2 -DHAVE_CONFIG_H -c bitmap.c -o bitmap.o
gcc -Wall -g -O2 -DHAVE_CONFIG_H -c dkhsh.c -o dkhsh.o
```

```
*** 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.

14. Install binaries, init scripts, and sample configuration files

sudo make install

sudo make install-init

sudo make install-config

sudo make install-commandmode

cd ./base && make install

```
[ec2-user@ip-172-31-95-252 nagios-4.4.6]$ sudo make install
sudo make install-init
sudo make install-config
sudo make install-commandmode
cd ./base && make install
cd ./base && make install
make[1]: Entering directory '/home/ec2-user/downloads/nagios-4.4.6/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-4.4.6/base'
cd ./cgi && make install
make[1]: Entering directory '/home/ec2-user/downloads/nagios-4.4.6/cgi'
make install-basic
make[2]: Entering directory '/home/ec2-user/downloads/nagios-4.4.6/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-4.4.6/cgi'
```

15. Edit the config file to change the email address

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

*Remember to edit the email only in the contacts.cfg file to the email you want

16. Create a nagios admin account

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

```
[ec2-user@ip-172-31-95-252 base]$ sudo htpasswd -c /usr/local/nagios/etc/htpasswd.users nagiosadmin
New password:
Re-type new password:
Adding password for user nagiosadmin
```

17. Restart apache

`sudo systemctl restart httpd`

```
[ec2-user@ip-172-31-95-252 nagios-4.4.6]$ sudo systemctl restart httpd
[ec2-user@ip-172-31-95-252 nagios-4.4.6]$ █
```

18. Extract the plugin source file, using following command

```
[ec2-user@ip-172-31-95-252 nagios-4.4.6]$ cd ~/downloads
tar zxvf nagios-plugins-2.3.3.tar.gz
cd nagios-plugins-2.3.3
nagios-plugins-2.3.3/
nagios-plugins-2.3.3/perlmods/
nagios-plugins-2.3.3/perlmods/Config-Tiny-2.14.tar.gz
nagios-plugins-2.3.3/perlmods/parent-0.226.tar.gz
nagios-plugins-2.3.3/perlmods/Test-Simple-0.98.tar.gz
nagios-plugins-2.3.3/perlmods/Makefile.in
nagios-plugins-2.3.3/perlmods/version-0.9903.tar.gz
nagios-plugins-2.3.3/perlmods/Makefile.am
nagios-plugins-2.3.3/perlmods/Module-Runtime-0.013.tar.gz
nagios-plugins-2.3.3/perlmods/Module-Metadata-1.000014.tar.gz
nagios-plugins-2.3.3/perlmods/Params-Validate-1.08.tar.gz
nagios-plugins-2.3.3/perlmods/Class-Accessor-0.34.tar.gz
nagios-plugins-2.3.3/perlmods/Try-Tiny-0.18.tar.gz
```

19. Compile and install plugins

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

```
make
```

```
sudo make install
```

```
nagios-plugins-2.3.3/gl/m4/glibc21.m4
nagios-plugins-2.3.3/gl/m4/largefile.m4
nagios-plugins-2.3.3/gl/m4/mbrtowc.m4
nagios-plugins-2.3.3/gl/m4/locale-zh.m4
nagios-plugins-2.3.3/gl/m4/gethostname.m4
nagios-plugins-2.3.3/gl/m4/wctype_h.m4
nagios-plugins-2.3.3/gl/m4/getopt.m4
nagios-plugins-2.3.3/gl/m4/time_r.m4
nagios-plugins-2.3.3/gl/m4/strtoull.m4
nagios-plugins-2.3.3/gl/m4/dirname.m4
nagios-plugins-2.3.3/gl/m4/xsize.m4
nagios-plugins-2.3.3/gl/m4/gnulib-common.m4
nagios-plugins-2.3.3/gl/m4/base64.m4
nagios-plugins-2.3.3/gl/m4/arpa_inet_h.m4
nagios-plugins-2.3.3/gl/m4/xalloc.m4
nagios-plugins-2.3.3/gl/m4/localeconv.m4
nagios-plugins-2.3.3/gl/m4/stdio_h.m4
nagios-plugins-2.3.3/gl/m4/alloca.m4
nagios-plugins-2.3.3/gl/m4/intmax_t.m4
nagios-plugins-2.3.3/gl/m4/wchar_t.m4
nagios-plugins-2.3.3/gl/m4/sys_types_h.m4
```

20. Start nagios

```
sudo chkconfig --add nagios
```

```
sudo chkconfig nagios on
```

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

```
sudo systemctl start nagios
```

```
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
```


21. Check the status of nagios

sudo systemctl status nagios

```
● nagios.service - Nagios Core 4.4.6
   Loaded: loaded (/usr/lib/systemd/system/nagios.service; enabled; preset: disabled)
   Active: active (running) since Wed 2024-10-02 02:18:37 UTC; 34min ago
     Docs: https://www.nagios.org/documentation
   Main PID: 2004 (nagios)
    Tasks: 6 (limit: 1112)
   Memory: 3.8M
      CPU: 462ms
   CGroup: /system.slice/nagios.service
           └─2004 /usr/local/nagios/bin/nagios -d /usr/local/nagios/etc/nagios.cfg
             └─2005 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
               └─2006 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
                 └─2007 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
                   └─2008 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
                     └─2009 /usr/local/nagios/bin/nagios -d /usr/local/nagios/etc/nagios.cfg

Oct 02 02:18:37 ip-172-31-95-252.ec2.internal nagios[2004]: wproc: Registry request: name=Core Worker 2005;pid=2005
Oct 02 02:18:37 ip-172-31-95-252.ec2.internal nagios[2004]: Successfully launched command file worker with pid 2009
Oct 02 02:20:29 ip-172-31-95-252.ec2.internal nagios[2004]: SERVICE ALERT: localhost;HTTP;CRITICAL;HARD;4;connect to address 127.0.0.1
Oct 02 02:22:59 ip-172-31-95-252.ec2.internal nagios[2004]: SERVICE NOTIFICATION: nagiosadmin;localhost;Swap Usage;CRITICAL;notify-s
lines 1-20
```

22. Access the nagios web interface

- Copy the Public IP address of your EC2 instance.
- Open your browser and navigate to `http://<your_public_ip_address>/nagios`.
- Enter the username nagiosadmin and the password you set in Step 16.

