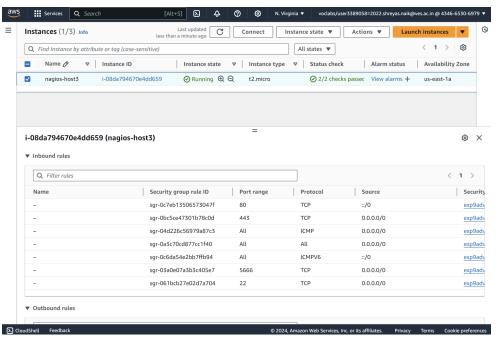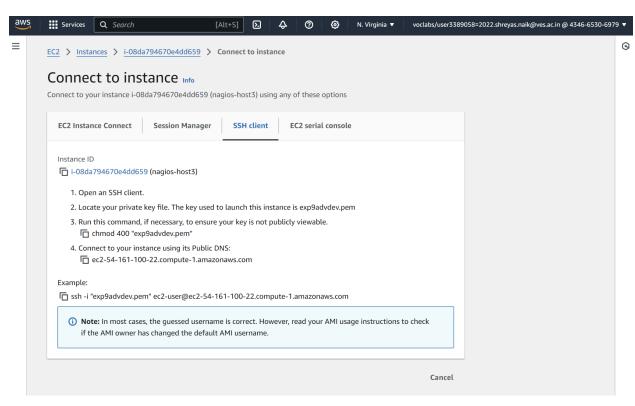## Steps

1) Create Amazon linux EC2 instance with rsa key pair and security group with all inbound rules as shown below

2) Go the directory folder that contains the rsa key
3) ssh -i "exp9advdev.pem" ec2-user@ec2-54-161-100-22.compute-1.amazonaws.com

```
ASUS@LAPTOP-O38NG844 MINGW64 ~
$ cd C:\keyAdvDevOpsExp9

ASUS@LAPTOP-O38NG844 MINGW64 /c/keyAdvDevOpsExp9
$ ec2-54-161-100-22.compute-1.amazonaws.com
bash: ec2-54-161-100-22.compute-1.amazonaws.com: command not found

ASUS@LAPTOP-O38NG844 MINGW64 /c/keyAdvDevOpsExp9
$ ssh -i "exp9advdev.pem" ec2-user@ec2-54-161-100-22.compute-1.amazonaws.com
The authenticity of host 'ec2-54-161-100-22.compute-1.amazonaws.com (54.161.100.
22)' can't be established.
ED25519 key fingerprint is SHA256:fe9wxWksYueYFsT/W6vuiXHc4Y9/oebau6COCKO6qfk.
This host key is known by the following other names/addresses:
    ~/.ssh/known_hosts:6: 54.161.100.22
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added 'ec2-54-161-100-22.compute-1.amazonaws.com' (ED25519)
 to the list of known hosts.
        #_
   ,        #_
   ~\_    ####_          Amazon Linux 2023
  ~~   \_#####\
  ~~       \###|
  ~~        \#/  ___     https://aws.amazon.com/linux/amazon-linux-2023
   ~~       V~' '->
    ~~~         /
      ~~._.   _/
        _/ _/
       _/m/'
```

4) sudo yum update
5) sudo yum install httpd php
6) sudo yum install gcc glibc glibc-common
7) sudo yum install gd gd-devel

```
[ec2-user@ip-172-31-39-112 ~]$ sudo yum update
Last metadata expiration check: 0:29:10 ago on Wed Oct  2 06:24:18 2024.
Dependencies resolved.
Nothing to do.
Complete!
[ec2-user@ip-172-31-39-112 ~]$ sudo yum install httpd php
Last metadata expiration check: 0:29:24 ago on Wed Oct  2 06:24:18 2024.
Dependencies resolved.
================================================================================
 Package            Arch      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
```

```
[ec2-user@ip-172-31-39-112 ~]$ sudo yum install gcc glibc glibc-common
Last metadata expiration check: 0:29:53 ago on Wed Oct  2 06:24:18 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              Arch      Version                      Repository    Size
================================================================================
Installing:
 gcc                  x86_64    11.4.1-2.amzn2023.0.2         amazonlinux    32 M
Installing dependencies:
```

```
[ec2-user@ip-172-31-39-112 ~]$ sudo yum install gd gd-devel
Last metadata expiration check: 0:30:18 ago on Wed Oct  2 06:24:18 2024.
Dependencies resolved.
================================================================================
 Package               Arch       Version                   Repository    Size
================================================================================
Installing:
 gd                    x86_64     2.3.3-5.amzn2023.0.3       amazonlinux   139 k
```

8) sudo adduser -m nagios
9) sudo passwd nagios
10) sudo groupadd nagcmd
11) sudo usermod -a -G nagcmd nagios
12) sudo usermod -a -G nagcmd apache
13) mkdir downloads
14) cd downloads
15) wget http://prdownloads.sourceforge.net/sourceforge/nagios/nagios-4.0.8.tar.gz
16) wget http://nagios-p1ugins.org/down10ad/nagios-p1ugins-2.0.3.tar.gz
17) tar zxvf nagios-4.0.8.tar.gz

```
[ec2-user@ip-172-31-39-112 ~]$ sudo adduser -m nagios
[ec2-user@ip-172-31-39-112 ~]$ sudo passwd nagios
Changing password for user nagios.
New password:
Retype new password:
passwd: all authentication tokens updated successfully.
[ec2-user@ip-172-31-39-112 ~]$ sudo groupadd nagcmd
[ec2-user@ip-172-31-39-112 ~]$ sudo usermod -a -G nagcmd nagios
[ec2-user@ip-172-31-39-112 ~]$ sudo usermod -a -G nagcmd apache
[ec2-user@ip-172-31-39-112 ~]$ mkdir downloads
[ec2-user@ip-172-31-39-112 ~]$ cd downloads
[ec2-user@ip-172-31-39-112 downloads]$ wget http://prdownloads.sourceforge.net/s
ourceforge/nagios/nagios-4.0.8.tar.gz
--2024-10-02 06:58:59--  http://prdownloads.sourceforge.net/sourceforge/nagios/n
agios-4.0.8.tar.gz
```

```
[ec2-user@ip-172-31-39-112 downloads]$ wget http://nagios-plugins.org/download/n
agios-plugins-2.0.3.tar.gz
--2024-10-02 07:00:47--  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... conne
cted.
```

18) cd nagios-4.0.3

19). /configure --with-command-group=nagcmd

```
[ec2-user@ip-172-31-39-112 downloads]$ cd nagios-4.0.8
[ec2-user@ip-172-31-39-112 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
```

20) make all

```
[ec2-user@ip-172-31-39-112 nagios-4.0.8]$ make all
cd ./base && make
make[1]: Entering directory '/home/ec2-user/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
```

21) sudo make install

22) sudo make install-init

23) sudo make install-config

24) sudo make install-commandmode

```
@ip-172-31-39-112 nagios-4.0.8]$ sudo make install
 && make install
Entering directory '/home/ec2-user/downloads/nagios-4.0.8/base'
all-basic
```

```
[ec2-user@ip-172-31-39-112 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 daemon-init /etc/rc.d/init.d/nagios

*** Init script installed ***

[ec2-user@ip-172-31-39-112 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
```

```
[ec2-user@ip-172-31-39-112 nagios-4.0.8]$ sudo make install-commandmode
/usr/bin/install -c -m 775 -o nagios -g nagios -d /usr/local/nagios/var/rw
chmod g+s /usr/local/nagios/var/rw

*** External command directory configured ***

[ec2-user@ip-172-31-39-112 nagios-4.0.8]$ sudo nano /usr/local/nagios/etc/object
s/contacts.cfg
[ec2-user@ip-172-31-39-112 nagios-4.0.8]$ sudo make install-webconf
/usr/bin/install -c -m 644 sample-config/httpd.conf /etc/httpd/conf.d/nagios.con
f
```

25) sudo nano /usr/local/nagios/etc/objects/contacts.cfg
   After running this command add your email address in define contact function
26) sudo make install-webconf
27) sudo htpasswd -c /usr/local/nagios/etc/htpasswd.users nagiosadmin
28) sudo service httpd restart
29) cd ~/downloads/
30) tar zxvf nagios-plugins-2.e.3.tar.gz

```
[ec2-user@ip-172-31-39-112 nagios-4.0.8]$ sudo htpasswd -c /usr/local/nagios/etc
/htpasswd.users nagiosadmin
New password:
Re-type new password:
Adding password for user nagiosadmin
[ec2-user@ip-172-31-39-112 nagios-4.0.8]$ sudo service httpd restart
Redirecting to /bin/systemctl restart httpd.service
[ec2-user@ip-172-31-39-112 nagios-4.0.8]$ cd ~/downloads/
[ec2-user@ip-172-31-39-112 downloads]$ tar zxvf 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
```

32) cd nagios-plugins-2.0.3
33) ./configure --with-nagios-user=nagios --with-nagios-group=nagios

```
[ec2-user@ip-172-31-39-112 nagios-plugins-2.0.3]$ ./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
```

34) sudo make install

```
[ec2-user@ip-172-31-39-112 nagios-plugins-2.0.3]$ sudo make install
Making install in gl
make[1]: Entering directory '/home/ec2-user/downloads/nagios-plugins-2.0.3/gl'
rm -f alloca.h-t alloca.h && \
{ echo '/* DO NOT EDIT! GENERATED AUTOMATICALLY! */'; \
  cat ./alloca.in.h; \
} > alloca.h-t && \
```

35) sudo chkconfig --add nagios

36) sudo chkconfig nagios on

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

```
[ec2-user@ip-172-31-39-112 nagios-plugins-2.0.3]$ sudo chkconfig --add nagios
[ec2-user@ip-172-31-39-112 nagios-plugins-2.0.3]$ sudo chkconfig nagios on
[ec2-user@ip-172-31-39-112 nagios-plugins-2.0.3]$ sudo /usr/local/nagios/bin/nagios -v /us
gios/etc/nagios.cfg

Nagios Core 4.0.8
Copyright (c) 2009-present Nagios Core Development Team and Community Contributors
```

38) sudo nano /usr/local/nagios/etc/nagios.c

39) sudo chown -R nagios:nagios /usr/local/n

```
[ec2-user@ip-172-31-39-112 nagios-plugins-2.0.3]$ sudo nano /usr/local/nagios/etc/nagios.c
[ec2-user@ip-172-31-39-112 nagios-plugins-2.0.3]$ sudo chown -R nagios:nagios /usr/local/n
spool/checkresults
```

40) ls /usr/local/nagios/bin/

41) sudo /usr/local/nagios/bin/nagios /usr/local/nagios/etc/nagios.cfg

42) sudo nano /etc/systemd/system/nagios.service

After this command add below code in the blank window

```
[Unit]
Description=Nagios Service
After=network.target

[Service]
User=nagios
Group=nagios
ExecStart=/usr/local/nagios/bin/nagios /usr/local/nagios/etc/nagios.cfg

[Install]
WantedBy=multi-user.target
```

```
[ec2-user@ip-172-31-39-112 nagios-plugins-2.0.3]$ ls /usr/local/nagios/bin/
nagios  nagiostats
[ec2-user@ip-172-31-39-112 nagios-plugins-2.0.3]$ sudo /usr/local/nagios/bin/nagios /usr/l
s/etc/nagios.cfg
```

```
[ec2-user@ip-172-31-39-112 nagios-plugins-2.0.3]$ sudo nano /etc/systemd/system/nagios.service
[ec2-user@ip-172-31-39-112 nagios-plugins-2.0.3]$
```

43) sudo yum update

44) sudo yum install httpd php

```
[ec2-user@ip-172-31-39-112 ~]$ sudo yum update
Last metadata expiration check: 0:29:10 ago on Wed Oct  2 06:24:18 2024.
Dependencies resolved.
Nothing to do.
Complete!
[ec2-user@ip-172-31-39-112 ~]$ sudo yum install httpd php
Last metadata expiration check: 0:29:24 ago on Wed Oct  2 06:24:18 2024.
Dependencies resolved.
```

45) sudo systemctl daemon-reload

46) sudo systemctl start nagios

47) sudo systemctl enable nagios

48) sudo service nagios start

```
[ec2-user@ip-172-31-39-112 nagios-plugins-2.0.3]$ sudo systemctl daemon-reload
[ec2-user@ip-172-31-39-112 nagios-plugins-2.0.3]$ sudo systemctl start nagios
[ec2-user@ip-172-31-39-112 nagios-plugins-2.0.3]$ sudo systemctl enable nagios
Synchronizing state of nagios.service with SysV service script with /usr/lib/systemd/syste
stall.
Executing: /usr/lib/systemd/systemd-sysv-install enable nagios
Created symlink /etc/systemd/system/multi-user.target.wants/nagios.service → /etc/systemd/
ios.service.
[ec2-user@ip-172-31-39-112 nagios-plugins-2.0.3]$ sudo service nagios start
Starting nagios (via systemctl):                    [  OK  ]
[ec2-user@ip-172-31-39-112 nagios-plugins-2.0.3]$
```