

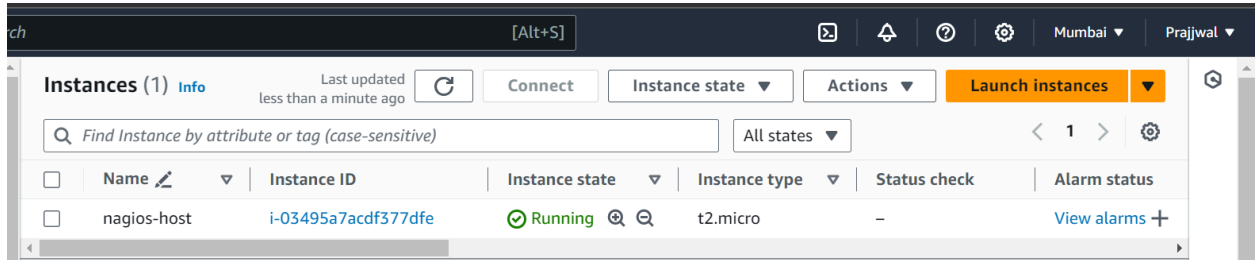
ADVANCE DEVOPS EXPERIMENT - 9

Prajwal Pandey D15A / 33

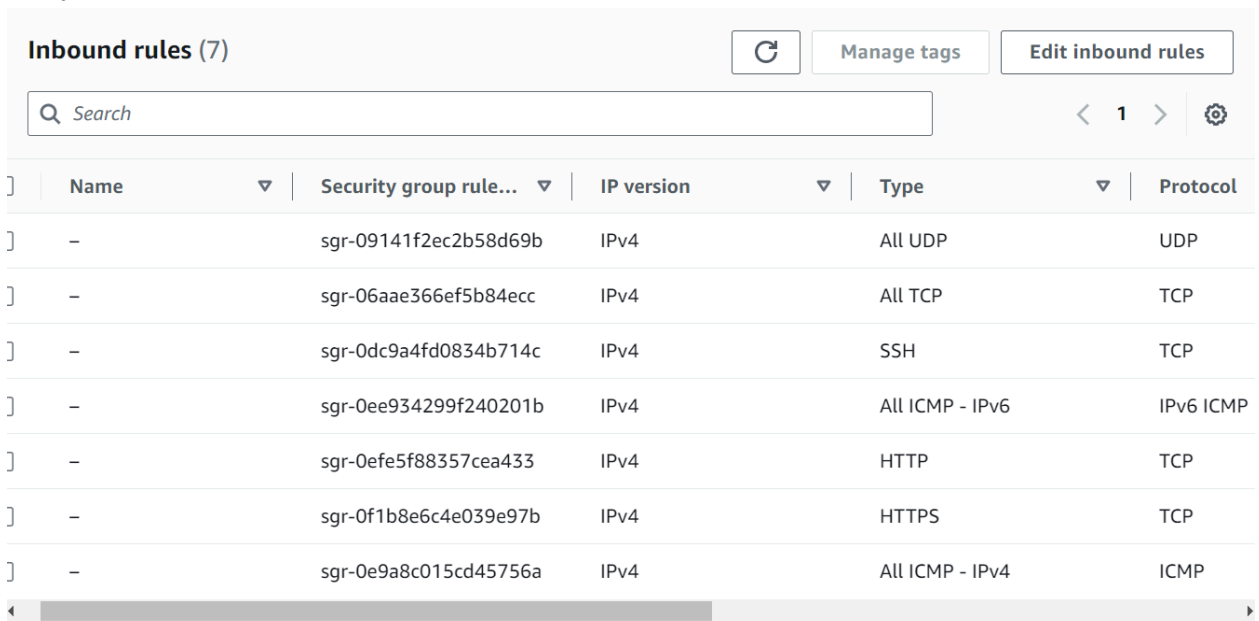
AIM: Installation of Nagios

Prerequisites: AWS Free Tier

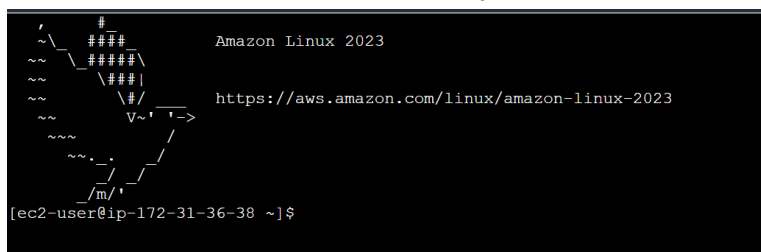
1. Create an Amazon Linux EC2 Instance in AWS and name it - nagios-host



2. Under Security Group, make sure HTTP, HTTPS, SSH, ICMP are open from everywhere.



3. SSH into Your EC2 instance or simply use EC2 Instance Connect from the browser.



4. Update the package indices and install the following packages using yum

```
sudo yum update
```

```
sudo yum install httpd php
```

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

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

```
libcurl-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
pcre2-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

Complete!
[ec2-user@ip-172-31-36-38 ~]$
```

i-03495a7acdf377dfe (nagios-host)

PublicIPs: 43.205.233.133 PrivateIPs: 172.31.36.38

5. Create a new Nagios User with its password. You'll have to enter the password twice for Confirmation.

```
sudo adduser -m nagios
```

```
sudo passwd nagios
```

```
sorry, passwords do not match.
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-172-31-36-38 ~]$
```

6. Create a new user group

```
sudo groupadd nagcmd
```

7. Use 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
```

8. Create a new directory for Nagios downloads

```
mkdir ~/downloads
```

```
cd ~/downloads
```

9. Use wget to download the source zip files.

```
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>

```
nagios-plugins-2.0.3.tar.gz      100%[=====>]
2024-09-29 14:00:39 (1.10 MB/s) - 'nagios-plugins-2.0.3.tar.gz' saved [2659772/2659772]
[ec2-user@ip-172-31-36-38 ~]$
```

i-03495a7acdf377dfe (nagios-host)

PublicIPs: 43.205.233.133 PrivateIPs: 172.31.36.38

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

`tar zxvf nagios-4.0.8.tar.gz`

11. Run the configuration script with the same group name you previously created.

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

```
Init directory: /etc/rc.d/init.d
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.
```

12. Compile the source code.

`make all`

13. Install binaries, init script and sample config files. Lastly, set permissions on the external command directory.

`sudo make install`

`sudo make install-init`

`sudo make install-config`

`sudo make install-commandmode`

```
*** 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.

```
/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 ***
```

14. Edit the config file and change the email address.

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

```
#####  
#####  
# 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  
    alias             Nagios Admin         ; Full name of user  
  
    email             prajjwal0904@gmail.com ; <<***** CHANGE THIS TO YOUR EMAIL ADDRESS *****  
}  
^X
```

15. Configure the web interface.

```
sudo make install-webconf
```

```
*** External command directory configured ***
```

```
[ec2-user@ip-172-31-36-38 nagios-4.0.8]$ sudo nano /usr/local/nagios/etc/objects/contacts.cfg  
[ec2-user@ip-172-31-36-38 nagios-4.0.8]$ sudo make install-webconf  
/usr/bin/install -c -m 644 sample-config/httpd.conf /etc/httpd/conf.d/nagios.conf
```

```
*** Nagios/Apache conf file installed ***
```

16. Create a nagiosadmin account for nagios login along with password. You'll have to specify the password twice.

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

```
[ec2-user@ip-172-31-36-38 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-172-31-36-38 nagios-4.0.8]$
```

17. Restart Apache

```
sudo service httpd restart
```

18. Go back to the downloads folder and unzip the plugins zip file.

```
cd ~/downloads
```

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

19. Compile and install plugins

```
cd nagios-plugins-2.0.3
./configure --with-nagios-user=nagios --with-nagios-group=nagios
make
sudo make install
```

20. Start Nagios

Add Nagios to the list of system services

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

```
sudo chkconfig nagios on
```

Verify the sample configuration files

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

If there are no errors, you can go ahead and start Nagios.

```
sudo service nagios start
```

```
Total Warnings: 0
Total Errors: 0

Things look okay - No serious problems were detected during the pre-flight check
[ec2-user@ip-172-31-36-38 bin]$ sudo service nagios start
Reloading systemd: [ OK ]
Starting nagios (via systemctl): [ OK ]
[ec2-user@ip-172-31-36-38 bin]$
```

21. Check the status of Nagios

```
sudo systemctl status nagios
```

```
Starting nagios (via systemctl): [ OK ]
[ec2-user@ip-172-31-36-38 bin]$ 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 Sun 2024-09-29 15:15:32 UTC; 45s ago
     Docs: man:systemd-sysv-generator(8).
   Process: 72490 ExecStart=/etc/rc.d/init.d/nagios start (code=exited, status=0/SUCCESS)
    Tasks: 6 (limit: 1112)
   Memory: 2.2M
      CPU: 56ms
   CGroup: /system.slice/nagios.service
```

22. Go back to EC2 Console and copy the Public IP address of this instance

ch [Alt+S] Mumbai Prajwal

Instances (1/1) Info Last updated about 1 hour ago [Connect](#) [Instance state](#) [Actions](#) [Launch instances](#)

Find Instance by attribute or tag (case-sensitive) All states

Instance state = running Clear filters

Name	Instance ID	Instance state	Instance type	Status check	Alarm status
nagios-host	i-03495a7acdf377dfe	Running	t2.micro	2/2 checks passed	View alarms

i-03495a7acdf377dfe (nagios-host)

Instance ID
i-03495a7acdf377dfe (nagios-host)

IPv6 address
-

Public IPv4 address
43.205.233.133 | [open address](#)

Instance state
Running

Public IPv4 DNS
172.31.36.38

23. Open up your browser and look for `http://<your_public_ip_address>/nagios`
Enter username as `nagiosadmin` and password which you set in Step 16.

24. After entering the correct credentials, you will see this page.

Nagios® Core™
Daemon running with PID 30094

Nagios® Core™ Version 4.0.8
August 12, 2014
[Check for updates](#)

A new version of Nagios Core is available!
Visit [nagios.org](#) to download Nagios 4.1.0

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- Extend Nagios with hundreds of add-ons
- Get support
- Get training
- Get certified

Quick Links

- Nagios Library (tutorials and docs)
- Nagios Labs (development blog)
- Nagios Exchange (plugins and addons)
- Nagios Support (back support)
- Nagios.com (company)
- Nagios.org (project)

Latest News

- Nagios Update: XI 5.0.0
- Nagios Update: XI 5.0.5
- Nagios Update: XI 5.0.4
- More news...

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This means that Nagios was correctly installed and configured with its plugins so far.