

EXPERIMENT NO. 9

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

1. Login to your AWS account Personal / Academy. Click on EC2 instance then click on Create Security Group. Give the name as Nagios and any description and add the following inbound rules.

The screenshot shows the AWS Management Console interface. The top navigation bar includes the AWS logo, 'Services', a search bar, and user information for 'Sydney' and 'bhumishap'. The main content area is divided into several sections:

- Console Home:** Includes a 'Recently visited' list with services like CloudWatch, Systems Manager, S3, Lambda, EC2, CodePipeline, and Elastic Beanstalk. It also has a 'Welcome to AWS' section with links for getting started and training.
- Applications (0):** A section for managing applications, currently showing 'No applications' and a 'Create application' button.
- AWS Health:** A section for monitoring the health of AWS services.
- Cost and usage:** A section showing current and forecasted month-end costs, with a bar chart for the last three months (May 24, Jul 24, Sep 24).

The bottom section of the screenshot shows the 'Security Groups (14)' page. It features a search bar and a table listing the following security groups:

Name	Security group ID	Security group name	VPC ID	Description
-	sg-0ef1ffe1c9b9a15f	launch-wizard-10	yvc-0340ce013f393caf4	launch-wizard-10 creat
-	sg-0edf0ac973291ebbc	launch-wizard-9	yvc-0340ce013f393caf4	launch-wizard-9 create
-	sg-0508cc803b3cd17c9	default	yvc-0340ce013f393caf4	default VPC security gr
-	sg-0ade163eb26ea436f	master	yvc-0340ce013f393caf4	Security group for mas
-	sg-0c385f9c589cd7d7d	launch-wizard-2	yvc-0340ce013f393caf4	launch-wizard-2 create
-	sg-0a0bac122aee771f	node	yvc-0340ce013f393caf4	Security Group for nod

The 'Create security group' button is located in the top right corner of the Security Groups section.

Details

Security group name nagios	Security group ID sg-07366110359b11766	Description nagios	VPC ID vpc-0340ce013f393caf4
Owner 010928192223	Inbound rules count 6 Permission entries	Outbound rules count 1 Permission entry	

Inbound rules | Outbound rules | Tags

Inbound rules (6)

Search

	Name	Security group rule...	IP version	Type	Protocol	Port range
<input type="checkbox"/>	-	sgr-02834ca100ea9e499	IPv4	All traffic	All	All
<input type="checkbox"/>	-	sgr-04f609e4c68588b2a	IPv4	HTTPS	TCP	443
<input type="checkbox"/>	-	sgr-050341a0b8714c7...	IPv4	HTTP	TCP	80
<input type="checkbox"/>	-	sgr-0ae9c09a0dc55a21f	IPv4	Custom TCP	TCP	5666
<input type="checkbox"/>	-	sgr-057df07fa6d9b08c6	IPv4	SSH	TCP	22
<input type="checkbox"/>	-	sgr-05eb320f1bc5e345e	IPv4	All ICMP - IPv4	ICMP	All

2. Now Create a new EC2 instance. Name: nagios-host, AMI: Amazon Linux, Instance Type: t2.micro.

Launch an instance [Info](#)

Amazon EC2 allows you to create virtual machines, or instances, that run on the AWS Cloud. Quickly get started by following the simple steps below.

Name and tags [Info](#)

Name
nagios-host [Add additional tags](#)

Application and OS Images (Amazon Machine Image) [Info](#)

An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. Search or Browse for AMIs if you don't see what you are looking for below

Search our full catalog including 1000s of application and OS images

Recents | **Quick Start**

Amazon Linux | macOS | Ubuntu | Windows | Red Hat | SUSE Linux | [Browse more AMIs](#)

Including AMIs from AWS, Marketplace and the Community

Number of instances [Info](#)
1

Software Image (AMI)
Amazon Linux 2023 AMI 2023.5.2...[read more](#)
ami-0e8fd5cc56e4d158c

Virtual server type (instance type)
t2.micro

Firewall (security group)
nagios

Storage (volumes)
1 volume(s) - 8 GiB

Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per month, 750 hours of public IPv4 address usage per month, 30 GiB of EBS storage, 2 million IOPS, 1 GB of ephemeral and 100

Cancel **Launch instance** [Review commands](#)

For Key pair : Click on create key and make key of type RSA with extension .pem . Key will be downloaded to your local machine. Now select that key in the key pair, if you already have a key

with type RSA and extension .pem no need to create a new key but you must have that key downloaded.

▼ Instance type [Info](#) | [Get advice](#)

Instance type

t2.micro Free tier eligible

Family: t2 1 vCPU 1 GiB Memory Current generation: true

On-Demand SUSE base pricing: 0.0146 USD per Hour

On-Demand Linux base pricing: 0.0146 USD per Hour

On-Demand Windows base pricing: 0.0192 USD per Hour

On-Demand RHEL base pricing: 0.029 USD per Hour

☐ All generations

[Compare instance types](#)

[Additional costs apply for AMIs with pre-installed software](#)

▼ Key pair (login) [Info](#)

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.

Key pair name - *required*

↕

[Create new key pair](#)

Select the Existing Security Group and select the Security Group we have created in Step 1

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](#)

↕

nagios sg-07366110359b11766 ✕

VPC: vpc-0340ce013f393caf4

[Compare security group rules](#)

Security groups that you add or remove here will be added to or removed from all your network interfaces.

▼ Configure storage [Info](#) Advanced

1x GiB Root volume (Not encrypted)

☒ Free tier eligible customers can get up to 30 GB of EBS General Purpose (SSD) or Magnetic storage ✕

[Add new volume](#)

☒ Click refresh to view backup information

The tags that you assign determine whether the instance will be backed up by any Data Lifecycle Manager policies.

0 x File systems [Edit](#)

▼ Summary

Number of instances [Info](#)

Software Image (AMI)

Amazon Linux 2023 AMI 2023.5.2...[read more](#)

ami-0e8fd5cc56e4d158c

Virtual server type (instance type)

t2.micro

Firewall (security group)

nagios

Storage (volumes)

1 volume(s) - 8 GiB

Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per month, 750 hours of public IPv4 address usage per month, 30 GiB of EBS storage, 2 million IPsec 1 GB of eni storage and 100

Cancel [Launch instance](#) [Review commands](#)

Instances (1) [Info](#)

Last updated less than a minute ago [↕](#) [Connect](#) [Instance state](#) [Actions](#) [Launch instances](#)

[All states](#)

[Clear filters](#)

<input type="checkbox"/>	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS
<input type="checkbox"/>	nagios-host	i-0d111ce8296aa8a80	Running	t2.micro	Initializing	View alarms	ap-southeast-2a	ec2-52-65-36-109.ap-s


3. Now After creating the EC2 Instance click on connect and then copy the command which is given as example in the SSH Client section .



Connect to instance [Info](#)

Connect to your instance i-0d111ce8296aa8a80 (nagios-host) using any of these options


EC2 Instance Connect	Session Manager	SSH client	EC2 serial console
----------------------	-----------------	-------------------	--------------------

Instance ID

 i-0d111ce8296aa8a80 (nagios-host)

1. Open an SSH client.
2. Locate your private key file. The key used to launch this instance is ec2_keypair.pem
3. Run this command, if necessary, to ensure your key is not publicly viewable.
 `chmod 400 "ec2_keypair.pem"`
4. Connect to your instance using its Public DNS:
 `ec2-52-65-36-109.ap-southeast-2.compute.amazonaws.com`

Example:

```
 ssh -i "ec2_keypair.pem" ec2-user@ec2-52-65-36-109.ap-southeast-2.compute.amazonaws.com
```

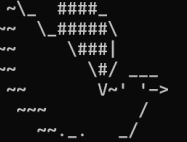
Note: In most cases, the guessed username is correct. However, read your AMI usage instructions to check if the AMI owner has changed the default AMI username.

Now open the terminal in the folder where your key(RSA key with .pem) is located.and paste that copied command

```
PS C:\Users\bhumi> cd "C:\Users\bhumi\OneDrive\Desktop\New folder"
PS C:\Users\bhumi\OneDrive\Desktop\New folder> |
```

Successfully connected to the instance.

```
C:\Users\bhumil\OneDrive\Desktop>New folder>ssh -i "ec2_keypair.pem" ec2-user@ec2-52-65-36-109.ap-southeast-2.compute.amazonaws.com
The authenticity of host 'ec2-52-65-36-109.ap-southeast-2.compute.amazonaws.com (52.65.36.109)' can't be established.
ED25519 key fingerprint is SHA256:02bkhs1WIuCzaK4PY2Kj8a5S8oam+usgK/JBm3A4M6I.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added 'ec2-52-65-36-109.ap-southeast-2.compute.amazonaws.com' (ED25519) to the list of known hosts.
```



```
#_
 _ \   #####      Amazon Linux 2023
## \_#####\
### \####|
### \#/
### \#/_--> https://aws.amazon.com/linux/amazon-linux-2023
#####
### _--
    /_m/'

[ec2-user@ip-172-31-40-157 ~]$
```

4. Now Run the following command to make a new user and set the password.
- ```
sudo adduser -m nagios
```

```
sudo passwd nagios
```

```
[ec2-user@ip-172-31-40-157 ~]$ sudo adduser -m nagios
sudo passwd nagios
Changing password for user nagios.
New password:
BAD PASSWORD: The password is shorter than 8 characters
Retype new password:
Sorry, passwords do not match.
New password:
Retype new password:
passwd: all authentication tokens updated successfully.
[ec2-user@ip-172-31-40-157 ~]$
```

5. Now Run the following command to make a new user group.

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

```
[ec2-user@ip-172-31-40-157 ~]$ sudo groupadd nagcmd
[ec2-user@ip-172-31-40-157 ~]$ sudo usermod -a -G nagcmd nagios
[ec2-user@ip-172-31-40-157 ~]$ sudo usermod -a -G nagcmd apache
```

6. Now make a new directory and go to that directory.

```
mkdir ~/downloads
cd ~/downloads
```

```
[ec2-user@ip-172-31-40-157 ~]$ mkdir ~/downloads
cd ~/downloads
[ec2-user@ip-172-31-40-157 downloads]$
```

7. Now to download the Nagios 4.5.5 and Nagios-plugins 2.4.11 run the following commands respectively.

```
wget https://go.nagios.org/l/975333/2024-09-17/6kqcx
```

```
[ec2-user@ip-172-31-40-157 downloads]$ wget https://go.nagios.org/l/975333/2024-09-17/6kqcx
--2024-10-04 22:45:39-- https://go.nagios.org/l/975333/2024-09-17/6kqcx
Resolving go.nagios.org (go.nagios.org)... 52.54.96.194, 18.208.125.13, 3.215.172.219, ...
Connecting to go.nagios.org (go.nagios.org)|52.54.96.194|:443... connected.
HTTP request sent, awaiting response... 302 Found
Location: http://assets.nagios.com/downloads/nagioscore/releases/nagios-4.5.5.tar.gz?utm_source=Nagios.org&utm_content=Download+Form&utm_campaign=Core+4.5.5+Download+&pi_content=1e9662c93afb2ed6bd2e3f3cc38771a7f01125e969f2a75b0e2254439d4a81d8 [following]
--2024-10-04 22:45:40-- http://assets.nagios.com/downloads/nagioscore/releases/nagios-4.5.5.tar.gz?utm_source=Nagios.org&utm_content=Download+Form&utm_campaign=Core+4.5.5+Download+&pi_content=1e9662c93afb2ed6bd2e3f3cc38771a7f01125e969f2a75b0e2254439d4a81d8
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|:80... connected.
HTTP request sent, awaiting response... 301 Moved Permanently
Location: https://assets.nagios.com/downloads/nagioscore/releases/nagios-4.5.5.tar.gz?utm_source=Nagios.org&utm_content=Download+Form&utm_campaign=Core+4.5.5+Download+&pi_content=1e9662c93afb2ed6bd2e3f3cc38771a7f01125e969f2a75b0e2254439d4a81d8 [following]
--2024-10-04 22:45:40-- https://assets.nagios.com/downloads/nagioscore/releases/nagios-4.5.5.tar.gz?utm_source=Nagios.org&utm_content=Download+Form&utm_campaign=Core+4.5.5+Download+&pi_content=1e9662c93afb2ed6bd2e3f3cc38771a7f01125e969f2a75b0e2254439d4a81d8
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: '6kqcx'

6kqcx 100%[=====] 1.97M 1.10MB/s in 1.8s

2024-10-04 22:45:43 (1.10 MB/s) - '6kqcx' saved [2065473/2065473]
```

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

```
[ec2-user@ip-172-31-40-157 downloads]$ wget https://nagios-plugins.org/download/nagios-plugins-2.4.11.tar.gz
--2024-10-04 22:46:21-- 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 1.16MB/s in 2.3s

2024-10-04 22:46:24 (1.16 MB/s) - 'nagios-plugins-2.4.11.tar.gz' saved [2753049/2753049]
```

8. Now to extract the files from the downloaded Nagios 4.5.5 run the following command.  
`tar zxvf 6kqcx`  
(Replace 6kqcx with your saved file name of Nagios 4.5.5 refer above screenshot)

```
[ec2-user@ip-172-31-40-157 downloads]$ tar zxvf 6kqcx
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/LLEGAL
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/xdata/xodtemplate.c
nagios-4.5.5/xdata/xodtemplate.h
nagios-4.5.5/xdata/xpddefault.c
nagios-4.5.5/xdata/xpddefault.h
nagios-4.5.5/xdata/xrddefault.c
nagios-4.5.5/xdata/xrddefault.h
nagios-4.5.5/xdata/xsddefault.c
nagios-4.5.5/xdata/xsddefault.h
[ec2-user@ip-172-31-40-157 downloads]$ |
```

9. Now change the directory to nagios-4.5.5  
`cd nagios-4.5.5`

```
[ec2-user@ip-172-31-40-157 downloads]$ cd nagios-4.5.5
[ec2-user@ip-172-31-40-157 nagios-4.5.5]$ |
```

10. Now run the following command to configure.

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

```
[ec2-user@ip-172-31-40-157 nagios-4.5.5]$./configure --with-command-group=nagcmd
checking for a BSD-compatible install... /usr/bin/install -c
checking build system type... x86_64-pc-linux-gnu
checking host system type... x86_64-pc-linux-gnu
checking for gcc... gcc
checking whether the C compiler works... yes
checking for C compiler default output file name... a.out
checking for suffix of executables...
checking whether we are cross compiling... no
checking for suffix of object files... o
checking whether the compiler supports GNU C... yes
checking for _DYNAMIC... yes
checking for _DYNAMIC... yes
checking for asprintf... yes
checking for vasprintf... yes
checking for sigaction... yes
checking for C99 vsnprintf... yes
checking for library containing getservbyname... none required
checking for library containing connect... none required
checking for initgroups... yes
checking for setenv... yes
checking for strdup... yes
checking for strstr... yes
checking for strtoul... yes
checking for unsetenv... yes
checking for type of socket size... size_t
checking for Kerberos include files... configure: WARNING: could not find include files
checking for pkg-config... pkg-config
checking for SSL headers... configure: error: Cannot find ssl headers
[ec2-user@ip-172-31-40-157 nagios-4.5.5]$ |
```

At the end we have found the error of cannot find ssl header

```
checking for pkg-config... pkg-config
checking for SSL headers... configure: error: Cannot find ssl headers
[ec2-user@ip-172-31-40-157 nagios-4.5.5]$ |
```

So run the following command to install ssl.

`sudo yum install openssl-devel`

```
[ec2-user@ip-172-31-40-157 nagios-4.5.5]$ sudo yum install openssl-devel
Last metadata expiration check: 0:16:22 ago on Fri Oct 4 22:35:57 2024.
Dependencies resolved.
=====
Package Architecture Version Repository Size
=====
Installing:
openssl-devel x86_64 1:3.0.8-1.amzn2023.0.14 amazonlinux 3.0 M
=====
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 31 MB/s | 3.0 MB 00:00

Total 21 MB/s | 3.0 MB 00:00
Running transaction check
Transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
 Preparing : openssl-devel-1:3.0.8-1.amzn2023.0.14.x86_64 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

Complete!
[ec2-user@ip-172-31-40-157 nagios-4.5.5]$ |
```

Now rerun the command

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

```
[ec2-user@ip-172-31-41-231 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 for... #CMAKE#
```

\*\*\* 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.

11. Now run the following commands to setup the Nagios.

`sudo make install`

```
[ec2-user@ip-172-31-40-157 nagios-4.5.5]$ sudo make install
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
```



```

*** Exfoliation theme installed ***
NOTE: Use 'make install-classicui' to revert to classic Nagios theme

make[1]: Leaving directory '/home/ec2-user/downloads/nagios-4.5.5'
make install-basic
make[1]: Entering directory '/home/ec2-user/downloads/nagios-4.5.5'
/usr/bin/install -c -m 775 -o nagios -g nagios -d /usr/local/nagios/libexec
/usr/bin/install -c -m 775 -o nagios -g nagios -d /usr/local/nagios/var
/usr/bin/install -c -m 775 -o nagios -g nagios -d /usr/local/nagios/var/archives
/usr/bin/install -c -m 775 -o nagios -g nagcmd -d /usr/local/nagios/var/spool/checkresults
chmod g+s /usr/local/nagios/var/spool/checkresults

*** Main program, CGIs and HTML files installed ***

You can continue with installing Nagios as follows (type 'make'
without any arguments for a list of all possible options):

 make install-init
 - This installs the init script in /lib/systemd/system

 make install-commandmode
 - This installs and configures permissions on the
 directory for holding the external command file

 make install-config
 - This installs sample config files in /usr/local/nagios/etc

make[1]: Leaving directory '/home/ec2-user/downloads/nagios-4.5.5'
[ec2-user@ip-172-31-40-157 nagios-4.5.5]$

```

### sudo make install-init

```

[ec2-user@ip-172-31-40-157 nagios-4.5.5]$ sudo make install-init
/usr/bin/install -c -m 755 -d -o root -g root /lib/systemd/system
/usr/bin/install -c -m 755 -o root -g root startup/default-service /lib/systemd/system/nagios.service
[ec2-user@ip-172-31-40-157 nagios-4.5.5]$

```

### sudo make install-config

```

[ec2-user@ip-172-31-40-157 nagios-4.5.5]$ 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.

```

### sudo make install-webconf

```

[ec2-user@ip-172-31-40-157 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 ***

```

## 12. To set the password

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

```
[ec2-user@ip-172-31-40-157 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
[ec2-user@ip-172-31-40-157 nagios-4.5.5]$ |
```

## 13. Now restart the httpd service and to do so, run the following command.

```
sudo service httpd restart
```

```
Adding password for user nagiosadmin
[ec2-user@ip-172-31-40-157 nagios-4.5.5]$ sudo service httpd restart
Redirecting to /bin/systemctl restart httpd.service
[ec2-user@ip-172-31-40-157 nagios-4.5.5]$ |
```

## 14. Now to extract the files from the downloaded Nagios plugin 2.4.11 run the following command first change the directory.

```
cd ~/downloads
```

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

```
Redirecting to /bin/systemctl restart httpd.service
[ec2-user@ip-172-31-40-157 nagios-4.5.5]$ cd ~/downloads
[ec2-user@ip-172-31-40-157 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/plugins-root/t/check_dhcp.t
nagios-plugins-2.4.11/plugins-root/t/check_icmp.t
nagios-plugins-2.4.11/po/
nagios-plugins-2.4.11/po/Makefile.in.in
nagios-plugins-2.4.11/po/remove-potcddate.sin
nagios-plugins-2.4.11/po/Makevars
nagios-plugins-2.4.11/po/POTFILES.in
nagios-plugins-2.4.11/po/fr.po
nagios-plugins-2.4.11/po/de.po
nagios-plugins-2.4.11/po/fr.gmo
nagios-plugins-2.4.11/po/de.gmo
nagios-plugins-2.4.11/po/nagios-plugins.pot
nagios-plugins-2.4.11/po/stamp-po
nagios-plugins-2.4.11/po/ChangeLog
nagios-plugins-2.4.11/po/LINGUAS
nagios-plugins-2.4.11/release
[ec2-user@ip-172-31-40-157 downloads]$ |
```

15. Now change the directory to nagios-plugins-2.4.11 and run the config command to configure.

```
cd nagios-plugins-2.4.11
```

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

```
[ec2-user@ip-172-31-40-157 downloads]$ cd nagios-plugins-2.4.11
[ec2-user@ip-172-31-40-157 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
```

```
config.status: creating perlmods/Makefile
config.status: creating test.pl
config.status: creating pkg/solaris/pkginfo
config.status: creating po/Makefile.in
config.status: creating config.h
config.status: config.h is unchanged
config.status: executing depfiles commands
config.status: executing libtool commands
config.status: executing po-directories commands
config.status: creating po/POTFILES
config.status: creating po/Makefile
[ec2-user@ip-172-31-40-157 nagios-plugins-2.4.11]$ |
```

16. Run the following commands to check nagios and start it. `sudo chkconfig --add nagios`

```
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-172-31-40-157 nagios-plugins-2.4.11]$ |
```

cd sudo service nagios start

```
Things look okay - No serious problems were detected during
[ec2-user@ip-172-31-40-157 nagios-plugins-2.4.11]$ cd
[ec2-user@ip-172-31-40-157 ~]$ sudo service nagios start
Redirecting to /bin/systemctl start nagios.service
[ec2-user@ip-172-31-40-157 ~]$ |
```

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

```
[ec2-user@ip-172-31-40-157 ~]$ 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.
```

sudo systemctl status nagios

```
Things look okay - No serious problems were detected during the pre-flight check
[ec2-user@ip-172-31-40-157 ~]$ sudo systemctl status nagios
● nagios.service - Nagios Core Monitoring
 Loaded: loaded (/etc/systemd/system/nagios.service; enabled; preset: disabled)
 Active: active (running) since Fri 2024-10-04 23:20:25 UTC; 5min ago
 Main PID: 57764 (nagios)
 Tasks: 6 (limit: 1112)
 Memory: 4.1M
 CPU: 59ms
 CGroup: /system.slice/nagios.service
 └─57764 /usr/local/nagios/bin/nagios /usr/local/nagios/etc/nagios.cfg
 └─57765 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
 └─57766 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
 └─57767 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
 └─57768 /usr/local/nagios/bin/nagios --worker /usr/local/nagios/var/rw/nagios.qh
 └─57769 /usr/local/nagios/bin/nagios /usr/local/nagios/etc/nagios.cfg

Oct 04 23:20:25 ip-172-31-40-157.ap-southeast-2.compute.internal nagios[57764]: wproc: Registry request: name=Core Worker 57765;pid=57765
Oct 04 23:20:25 ip-172-31-40-157.ap-southeast-2.compute.internal nagios[57764]: wproc: Registry request: name=Core Worker 57766;pid=57766
Oct 04 23:20:25 ip-172-31-40-157.ap-southeast-2.compute.internal nagios[57764]: wproc: Registry request: name=Core Worker 57767;pid=57767
Oct 04 23:20:25 ip-172-31-40-157.ap-southeast-2.compute.internal nagios[57764]: wproc: Registry request: name=Core Worker 57768;pid=57768
Oct 04 23:20:25 ip-172-31-40-157.ap-southeast-2.compute.internal nagios[57764]: wproc: Registry request: name=Core Worker 57769;pid=57769
Oct 04 23:20:25 ip-172-31-40-157.ap-southeast-2.compute.internal nagios[57764]: Successfully launched command file worker with pid 57769
Oct 04 23:20:55 ip-172-31-40-157.ap-southeast-2.compute.internal nagios[57764]: HOST ALERT: localhost;DOWN;SOFT;8;(No output on stdout) stderr: execvp(/usr/local/nagios
Oct 04 23:21:55 ip-172-31-40-157.ap-southeast-2.compute.internal nagios[57764]: HOST ALERT: localhost;DOWN;SOFT;9;(No output on stdout) stderr: execvp(/usr/local/nagios
Oct 04 23:22:55 ip-172-31-40-157.ap-southeast-2.compute.internal nagios[57764]: HOST ALERT: localhost;DOWN;HARD;10;(No output on stdout) stderr: execvp(/usr/local/nagios
[ec2-user@ip-172-31-40-157 ~]$ |
```

17. We can see we have successfully launched Nagios now .

Open <http://nagios/> here it is <http://<ip address>/nagios> and we can see the running web page of nagios.

**Nagios®**

General

- Home
- Documentation

**Current Status**

- Tactical Overview
- Map
- Hosts
- Services
- Host Groups
  - Summary
- Service Groups
  - Grid
- Problems
  - Services (Unhandled)
  - Hosts (Unhandled)
  - Network Outages
- Quick Search:

**Reports**

- Availability
- Trends
- Alerts
  - History
  - Summary
  - Histogram
- Notifications
- Event Log

**System**

- Comments
- Downtime
- Process Info
- Performance Info

**Nagios® Core™**

✓ Daemon running with PID 74291

**Nagios® Core™**  
**Version 4.5.5**  
September 17, 2024  
[Check for updates](#)

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- Change the look and feel of Nagios
- Extend Nagios with hundreds of addons
- Get support
- Get training
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- [Nagios Labs](#) (development blog)
- [Nagios Exchange](#) (plugins and addons)
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Page Tour

Conclusion: In this experiment, we have set up the Nagios core with plugins on Amazon Linux. Which will help us to understand Continuous monitoring and Installation. It is important to note that whatever set of rules we have added in step 1 are very important for this experiment.

